ALTUSEN™
Enterprise KVM Solutions by ATEN

8 Console 32 Port
Matrix™ KVM Switch
KM0832
User Manual

FCC Information

This is an FCC Class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

User Notice

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed “as is.” Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.

Safety Instructions

General

- Read all of these instructions. Save them for future reference.
- Follow all warnings and instructions marked on the device.
- Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- Do not use the device near water.
- Do not place the device near, or over, radiators or heat registers.
- The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- Never spill liquid of any kind on the device.
- Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.
- If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or uninterruptible power supply (UPS).

- Position system cables and power cables carefully; be sure that nothing rests on any cables.
- When connecting or disconnecting power to hot pluggable power supplies, observe the following guidelines:
- Install the power supply before connecting the power cable to the power supply.
- Unplug the power cable before removing the power supply.
- If the system has multiple sources of power, disconnect power from the system by unplugging all power cables from the power supplies.
- Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
  - The power cord or plug has become damaged or frayed.
  - Liquid has been spilled into the device.
  - The device has been exposed to rain or water.
  - The device has been dropped, or the cabinet has been damaged.
  - The device exhibits a distinct change in performance, indicating a need for service.
  - The device does not operate normally when the operating instructions are followed.
- Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

Rack Mounting

- Before working on the rack, make sure that the stabilizers are secured to the rack, extended to the floor, and that the full weight of the rack rests on the floor. Install front and side stabilizers on a single rack or front stabilizers for joined multiple racks before working on the rack.
- Always load the rack from the bottom up, and load the heaviest item in the rack first.
- Make sure that the rack is level and stable before extending a device from the rack.
- Use caution when pressing the device rail release latches and sliding a device into or out of a rack; the slide rails can pinch your fingers.
- After a device is inserted into the rack, carefully extend the rail into a locking position, and then slide the device into the rack.
- Do not overload the AC supply branch circuit that provides power to the rack. The total rack load should not exceed 80 percent of the branch circuit rating.
- Ensure that proper airflow is provided to devices in the rack.
- Do not step on or stand on any device when servicing other devices in a rack.

Package Contents

The KM0832 package consists of:

1 KM0832 Matrix™ KVM Switch

1 Power Cord

1 Rack Mount Kit (brackets and Phillips hex head screws M3 x 8)

1 Foot Pad Set (4 pcs.)

1 User Manual*

1 Quick Start Guide

1 Registration Card

Check to make sure that all of the components are present and in good order. If anything is missing, or was damaged in shipping, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the switch or to any other devices on the KM0832 installation.

***** Features may have been added to the KM0832 since this manual was printed. Please visit our website to download the most up-to-date version of the manual.

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About This Manual

This User Manual is provided to help you get the most from your KM0832 system. It covers all aspects of installation, configuration, and operation. An overview of the information found in the manual is provided below.

Overview

Chapter 1, Introduction, introduces you to the KM0832 System. Its purpose, features, and benefits are presented, and its front and back panel components are described.

Chapter 2, Installation, provides step-by-step instructions for setting up your installation, and explains some basic operating procedures.

Chapter 3, Administrator Utility, describes how to log into the KM0832 with your browser and explains the administrative procedures that are employed to configure the KM0832's working environment using the KM0832 Administrator Utility.

Chapter 4, OSD Operation, provides detailed information for configuring and controlling your installation using the KM0832's intuitive, mouse-driven On Screen Display (OSD) menus.

Chapter 5, Hotkey Operation, explains the concepts and procedures used in controlling the KM0832 from the keyboard.

Chapter 6, Keyboard Emulation, lists the keys for a PC-compatible keyboard to emulate the functions of the Mac and Sun keyboards.

An Appendix at the end of the manual provides technical and troubleshooting information.

Conventions

This manual uses the following conventions:

`Monospaced`	Indicates text that you should key in.
[ ]	Indicates keys you should press. For example, [Enter] means to press the **Enter** key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt].
1.	Numbered lists represent procedures with sequential steps.
♦	Bullet lists provide information, but do not involve sequential steps.
→	Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start → Run means to open the *Start* menu, and then select *Run*.
⚠	Indicates critical information.

ALTUSEN Information

Technical Support

North America Technical Phone Support	Registered ALTUSEN product owners are entitled to telephone technical support. Call the ALTUSEN Technical Support Center: 949-453-8885.
International Technical Phone Support	1. Contact your local dealer. 2. Call the ALTUSEN Technical Support Center:(886-2) 8692-6959.
Email Support	E-mail your questions and concerns to: support@altusen.com
Online Support ◆ Troubleshooting ◆ Documentation ◆ Software Updates	Online troubleshooting that describes the most commonly encountered problems and offers possible solutions to them; online documentation (including electronically available manuals); and the latest drivers and firmware for your product are available at the ALTUSEN website: **http://www.altusen.com**

Getting Help

For additional help, advice, and information, ALTUSEN provides several support options. If you need to contact ALTUSEN technical support with a problem, please have the following information ready beforehand:

- Product model number, serial number, and date of purchase.
- Your computer configuration, including operating system, revision level, expansion cards, and software.
- Any error messages displayed at the time the error occurred.
- The sequence of operations that led up to the error.
- Any other information you feel may be of help

Product Information

For information about all of ALTUSEN's products and how they can help you connect without limits, visit ALTUSEN on the web or contact an ALTUSEN Authorized Reseller.

- In the United States of America, call: 866-ALTUSEN (258-8736)
- In Canada and South America, call: 949-453-8885
- In all other locations, call: 886-2-8692-6789
- Visit ALTUSEN on the web at http://www.altusen.com for a list of locations and telephone numbers

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Chapter 1
Introduction

Overview

The KM0832 Matrix KVM Switch gives IT administrators in large corporations advanced control of multiple servers. Operators working at up to eight *consoles* (monitor, keyboard, and mouse) can independently and simultaneously take direct control of up to 32 computers. By cascading additional KM0832 and daisy chaining KM0432, up to 36 operators can access and control up to 8,192 computers.

The 8 consoles belonging to the *master* station (the root, or highest level KM0832) are able to access all the computers on the installation—those that are directly connected as well as those that are daisy chained and cascaded. The 4 consoles belonging to each of the *slave* stations (the daisy chained KM0432 switches) can only access the computers that are connected to them on the same daisy chain level (directly connected and cascaded).

The KM0832 features a modular design with automatic console conversion that allows any combination of PS/2 and USB consoles to control any combination of PS/2, USB, Sun, Mac, and serial computers. The RJ-45 CPU connectors, combined with Auto Signal Compensation (ASC), allow signals to travel up to 300 meters between Console Module and CPU Module and still maintain high video resolution, eliminating the need for KVM extenders, and allowing the installation to take advantage of the internal Category 5e and Category 6 wiring built in to most modern commercial buildings. In addition, use of RJ-45 connectors saves precious IT real estate by allowing a full 8 User Ports and 32 CPU Ports to reside in a single 1U system housing.

Setup is fast and easy—plugging cables into their appropriate ports is all that is entailed. Because the KM0832 intercepts keyboard and mouse input directly, there is no software to configure, so there is no need to get involved in complex installation routines or be concerned with incompatibility problems.

Access to any computer is easily accomplished either by means of a powerful menu-driven OSD (On Screen Display) system, or by entering *Hotkey* combinations from the keyboard. A convenient *Auto Scan* feature also permits automatic scanning and monitoring of the activities of all computers running on the installation one-by-one.

Features

- Eight consoles independently and simultaneously control up to 32 directly connected computers
- Supports up to 1024 user accounts
- Supports up to 256 group accounts
- Saves valuable time—backup and restore settings when changing root stations[1]
- Three-level password security: Super Administrator, Administrator, and User
- Cascades three levels to support up to 8,192 computers
- Multiplatform support: PC, Mac, Sun, and serial
- Detachable front panel for easy access to front and rear of unit
- Console conversion—any type of console can control any type of computer; mixed combinations (PS/2 & USB) supported on both the console and computer sides
- Additional User Port on front panel for easy system maintenance[2]
- Hot pluggable—add or remove components without having to power off the switch
- No software to install
- Convenient computer selection via intuitive hotkey combinations or On Screen Display (OSD) menus
- Daisy chain up to 7 additional KM0432 stations[3]
- Up to 36 consoles control the computers in a full daisy chained installation
- OSD port list automatically expands when stations are added—port names are automatically reconfigured when the station sequence is changed
- OSD screen automatically adjusts to resolution changes
- Auto Scan feature for monitoring user-selected computers

1. Backup user and group accounts, station names, port access rights, and user profile settings.
2. Shares the same bus with User Port 1 on the rear panel.
3. If this feature is not operative on your unit, you will need a newer version of the firmware. Contact your dealer for details.

- PS/2 keyboard and mouse emulation—computers boot even when the console focus is elsewhere
- LCD, VGA, SVGA, XGA, and MultiSync support; DDC2B
- Superior video quality—1024 x 768 @ 60Hz for up to 300m; 1920 x 1440 @ 60Hz (distance depends on installation environment)
- Auto Signal Compensation (ASC) assures optimum video resolution for distances up to 300m between computers and consoles—no DIP switch setting required
- Free lifetime firmware upgrades
- Compact design—rack mounts in only 1U of rack space

Benefits

The KM0832 Matrix KVM Switch saves time and money by allowing a single console to manage each of the connected computers. A KM0832 installation provides the following benefits:

- Eliminates the cost of a keyboard, monitor, and mouse for each computer.
- Eliminates the need for additional space for extra components.
- Saves on energy costs.
- Eliminates the inconvenience, time and effort required to move from one computer to another.
- Allows centralized control of computers located at non-contiguous locations on the site.

System Requirements

Consoles

The following equipment must be used for each console:

- A VGA, SVGA, or MultiSync monitor capable of the highest resolution that you will be using on any computer in the installation.
- Either a PS/2 or a USB keyboard and mouse.
- Console Modules are required to connect consoles to the KM0832. They provide flexibility for your installation by allowing PS/2 and USB interfaces to be mixed and matched at the console side. The Console Modules currently available are listed in the table below. Contact your dealer for details or refer to the documentation included with your Console Module.

Function	Model Number
PS/2 Console Module	KA9222
PS/2-USB Combo Graphic Console Module	KA9233
USB Console Module	KA9272

Computers

The following equipment must be installed on or used for each computer:

- An HDB-15 video port or, for legacy Sun systems, a Sun 13W3 video port.
- Either a PS/2 style (6 pin mini-DIN) mouse port and PS/2 style keyboard port; or USB ports (for a USB keyboard and USB mouse); or, for legacy Sun systems, a Sun style keyboard port (8 pin mini-DIN).
- CPU Modules are required to connect computers to the KM0832. Similar to Console Modules, they allow PS/2, USB, Sun, Mac, and serial computers to be attached to the KM0832. The CPU Modules currently available are listed in the table below. Contact your dealer for details.

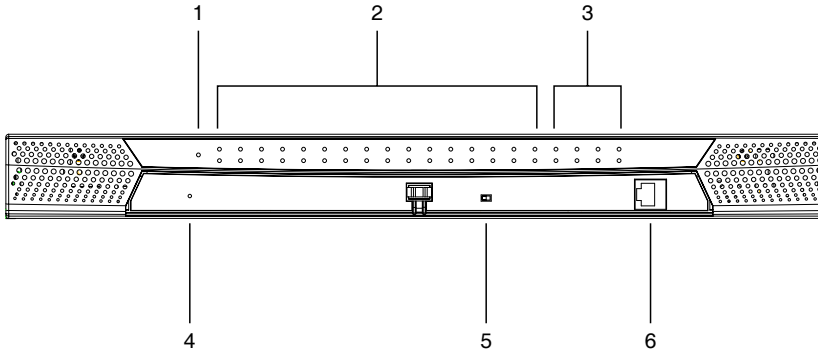
Function		Model Number
CPU Module	For PS/2 computers	KA9120
	For Sun Legacy computers	KA9130
	For Sun USB computers	KA9131
	For serial devices	KA9140
	For USB computers	KA9170

Cables

One or more of the following cables are required for use with the KM0832:

Function	Type
Console Module or CPU Module to KM0832 (see p. 108)	Category 5 cable
Daisy Chain Cable	2L-1700KM

KM0832 Front View



1. Power LED

Lights to indicate that the KM0832 is powered on.

2. CPU Port LEDs

The Port LEDs are multicolored (red / green / amber), and provide status information about their corresponding CPU Ports as follows:

Color	Condition	Indication
Amber	Steady	Port is selected; connected computer is on
	Flashing	Port is selected; port is cascaded to a powered on KVM switch
Red	Steady	Port is selected; connected computer is off
Green	Steady	Port is not selected; connected computer is on
	Flashing	Port is not selected; port is cascaded to a powered on KVM switch
Off		Port is not selected; connected computer is off

3. User Port LEDs

Lights (green) to indicate that the console connected to the corresponding port is online. Flashes when connected to the CPU Port(s) of a parent KVM station.

4. System Reset Button

- Pressing and holding in this switch for more than three seconds performs a system reset.

Note: This switch is semi-recessed and must be pushed with a thin object—such as the end of a paper clip or a ballpoint pen.

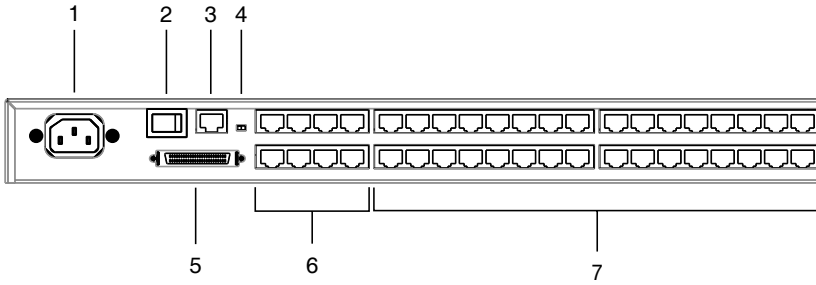
5. User Port 1 Switch

This switch selects which User Port 1 is active—the one on the front panel or the rear panel. Set it to *Front* to activate User Port 1 on the front panel; set it to *Rear* to activate User Port 1 on the rear panel.

6. User Port 1 (Maintenance Port)

This port is provided for convenient and easy access for system maintenance. It shares the same function with User Port 1 on the rear panel. By switching the User Port 1 switch to *Front*, User Port 1 on the rear panel is deactivated and User Port 1 on the front panel is activated. Use it just as you would any other User Port. (You must return User Port 1 Switch to the *Rear* position to reactivate User Port 1 on the rear panel.)

KM0832 Rear View



1. Power Socket

The power cord to the AC source plugs in here.

2. Power Switch

This is a standard rocker switch that powers the station on and off.

3. Configuration Port

The KM0832 is connected to the LAN via the Configuration Port. It provides access to the KM0832 Administrator Utility to configure the switch, create and manage user and group accounts, set device access permissions, upgrade firmware, etc.

4. Firmware Upgrade Recovery Switch

During normal operation and while performing a firmware upgrade, this switch should be in the NORMAL position. See p. 66 for firmware upgrade recovery details.

5. Daisy Chain Port

When daisy chaining stations (see p. 22), this *Chain Out* port is used to connect the lower stations in the chain.

Note: If this feature is not operative on your unit, you will need a newer version of the firmware. Contact your dealer for details.

6. User Ports

The Category 5 cables from the Console Modules plug in here.

- User Port 1 shares its KVM access with User Port 1 on the front panel. The User Port 1 Switch (front panel) controls which of the two ports is active. See *User Port 1 Switch* on p. 7 for more information.

7. CPU Ports

The Category 5 cables that link the CPU Modules to the KM0832 plug in here.

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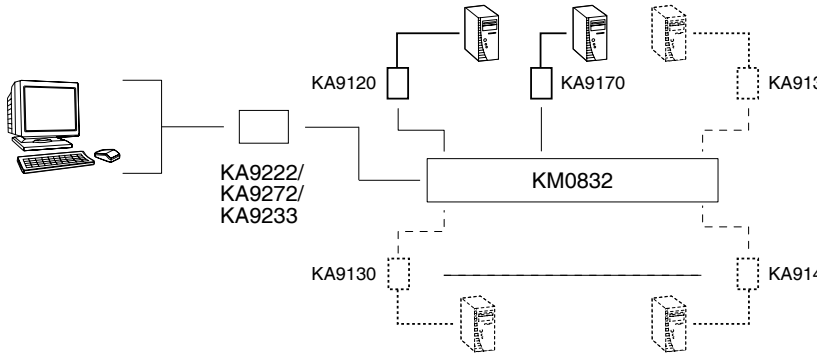
Chapter 2
Installation

Overview

For convenience and flexibility that allows mixing the PS/2 and USB interfaces, the KM0832's design utilizes *Console Modules* that act as signal translation intermediaries between the consoles and the switch, and *CPU Modules*, that serve as intermediaries between the switch and the computers:



A separate Console Module is required for each console you connect. Likewise, a separate CPU Module is required for each computer connected to the switch. Consult your dealer to find out which Console Modules and CPU Modules best fit your needs.

Before you Begin

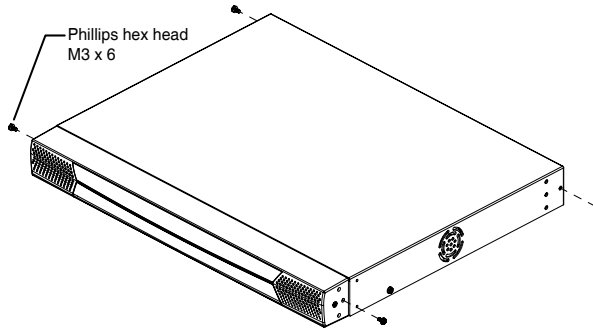
1. Important safety information regarding the placement of this device is provided on page iv. Please review it before proceeding.
2. Make sure that power to all devices you will be connecting has been turned off. You must unplug the power cords of any computers that have the Keyboard Power On function.

Rack Mounting

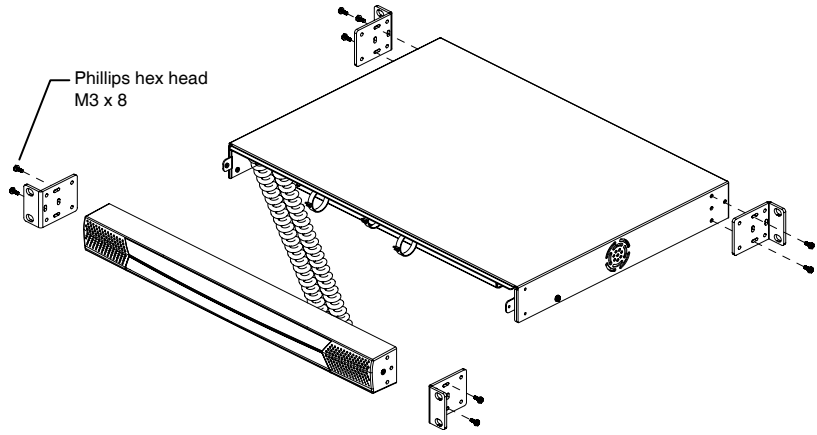
The KM0832 can be mounted in 1U of rack space. If you do not wish to rack mount the unit, see *Optional Desktop Installation*, page 107.

Standard Rack Mounting

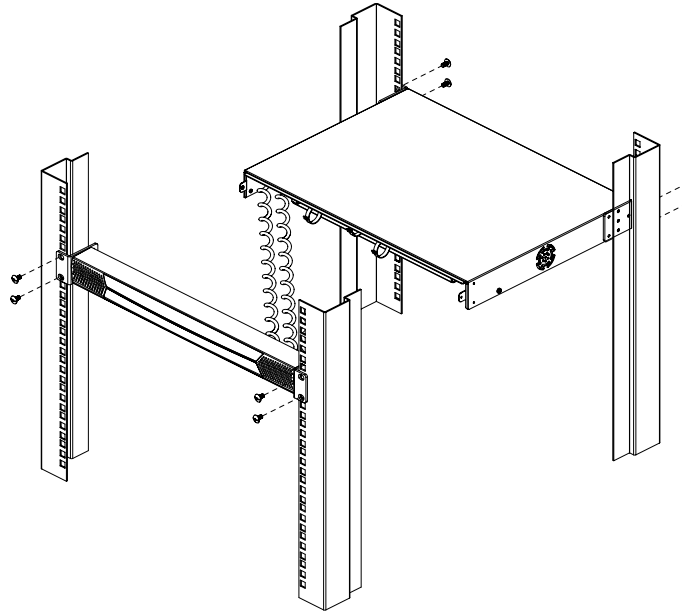
1. Remove the four screws from the sides of the unit, two at the front and two at the rear. The two screws at the front secure the detachable front panel to the chassis.



2. Using the screws provided with the rack mounting kit, screw the rack mounting brackets into the sides of the unit at the front and rear.

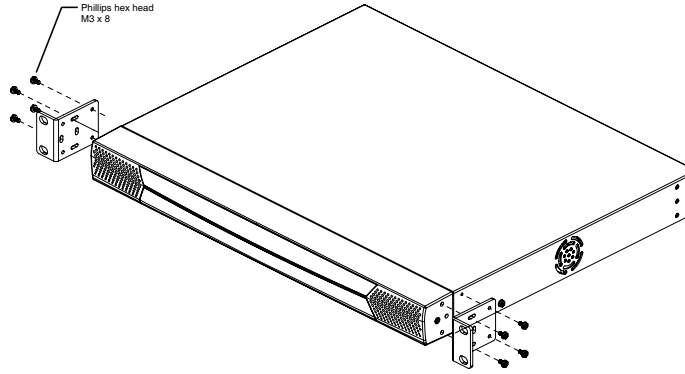


3. Slide the unit into the rack and secure it to the front and rear of the rack.

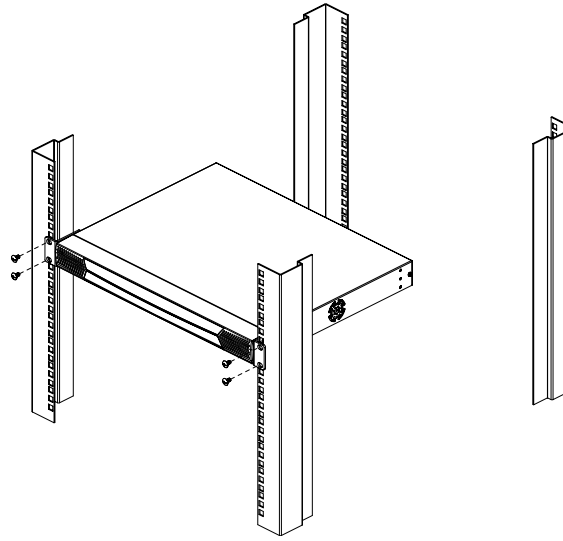


Front Rack Mounting

1. Remove the two screws that secure the detachable front panel to the chassis from the sides at the front of the unit. (See Step 1 under *Standard Rack Mounting*, page 12.)
2. Using the screws provided with the rack mounting kit, screw the rack mounting brackets into the sides of the unit at the front.

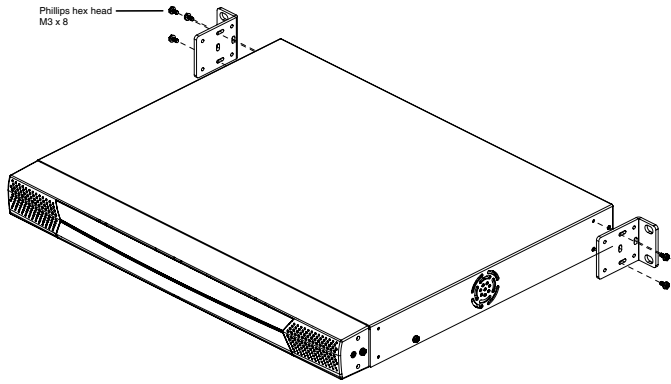


3. Slide the unit into the rack and secure it to the rack.

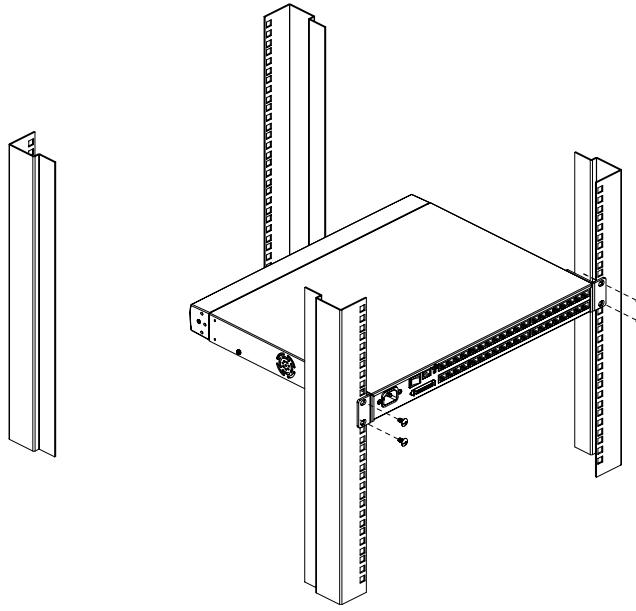


Rear Rack Mounting

1. Remove the two screws from the sides at the rear of the unit. (See Step 1 under *Standard Rack Mounting*, page 12.)
2. Using the screws provided with the rack mounting kit, screw the rack mounting brackets into the sides of the unit at the rear.



3. Slide the unit into the rack and secure it to the rack.



Single Stage Installation

In a Single Stage installation, there are no additional KVM switches cascaded or daisy chained down from the first station. To set up a single stage installation, refer to the diagram on page 17 (the numbers in the diagrams correspond to the numbered steps) and do the following:

1. Connect the console to the Console Module.

   Plug your keyboard, mouse, and monitor into their respective ports on the Console Module. Each port is marked with an identifying icon.

2. Connect the Console Module to the KM0832.

   Use Category 5 cable to connect the *Link* port of the Console Module to one of the User Ports on the KM0832's rear panel.

   (Repeat steps 1 and 2 for all consoles that you wish to connect. Up to 8 consoles may be connected in this fashion.)

Note: 1. The distance between any Console Module and any CPU Module must not exceed 300m (1000').

2. We strongly recommend that you use Category 5 shielded twisted pair (STP) cable.

3. Connect the CPU Module to the computer.

   Plug the connectors on the CPU Module into the appropriate ports on the computer you are installing.

4. Connect the CPU Module to the KM0832.

   Use Category 5 cable to connect a compatible CPU Module to any available CPU Port on the KM0832.

   (Repeat steps 3 and 4 for all computers that you wish to connect. Up to 32 computers may be connected in this fashion.)

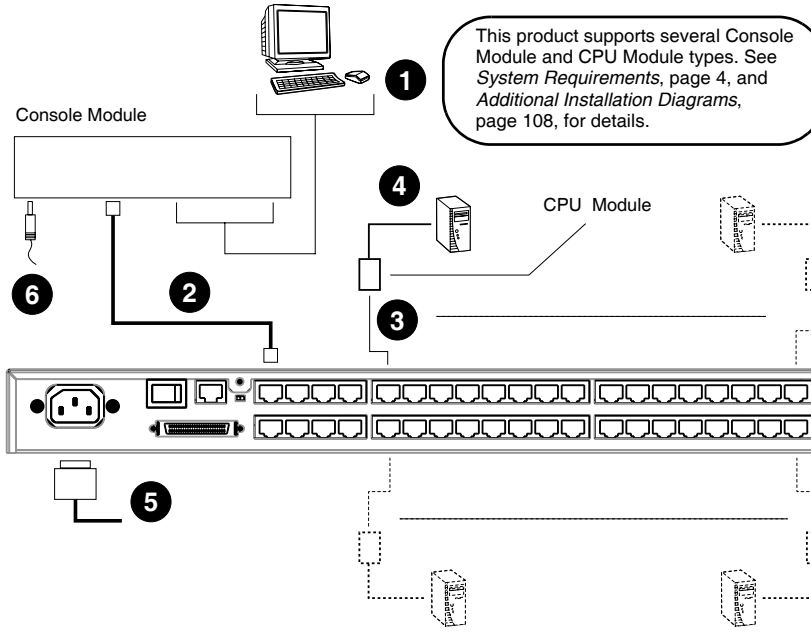
5. After all your computers have been cabled up, plug the female end of the power cord into the KM0832's Power Socket; plug the male end into an AC mains power source.

6. Connect the power adapter to the Console Module and to an AC mains power source appropriate for the device.

7. Turn on the power to the KM0832.

8. Turn on the power to the computers.

Single Stage Installation Diagram



Multilevel Installations

The number of computers that can be added to your installation can be greatly expanded by performing a multilevel installation. The KM0832 supports two types of multilevel installation:

- Cascading
- Daisy chaining

Overview

Cascading involves using the CPU Port(s) of a *parent* KVM switch (one that is above a switch linked down from it) to connect to the User Ports of a *child* KVM switch. With numerous child switches linked down from the parent, the effect is reminiscent of the way water cascades down over a waterfall. Cascading adds capacity to a KVM installation, but the parent KVM switch loses at least one CPU Port for each cascaded child switch.

Daisy chaining refers to connecting two KVM switches via dedicated daisy chain ports. The switches are strung together in a chain (see the diagram on p. 24), similar to the way children make chains of daisies by tying the end of one daisy to the head of another.

A daisy chained installation does not utilize CPU and User Ports to connect one switch to another as in a cascaded installation, thus preserving valuable port space. The port capacity of a daisy chained installation is the total of all the CPU Ports for all of the KVM switches on the chain. For example, a KM0832 has 32 CPU Ports. On an installation with eight daisy chained switches (one KM0832 and seven KM0432s), the number of available ports is 32 x 8 = 256.

The KM0832 supports both daisy chaining and cascading, providing enormous capacity and flexibility for expanding the installation. The following sections provide the information and procedures involved in setting up cascaded and daisy chained installations.

Note: If the daisy chain feature is not operative on your unit, you will need a newer version of the firmware. Contact your dealer for details.

The table below lists the KVM switches that are compatible with the KM0832.

Expansion Type	Brand	Model Number	Name
Cascade	Altusen	KM0832	8 Console 32 Port Matrix KVM Switch
Daisy Chain	Altusen	KM0432	4 Console 32 Port Matrix KVM Switch

Cascading

Another way of adding capacity is to cascade additional KVM switches from the KM0832's CPU Ports. The KM0832 supports up to three levels of cascading. However, unlike daisy chaining, cascading does not increase the number of consoles that can be used to control the computers.

In a cascaded installation, the first KVM switch is considered the *first stage* station; cascaded switches are considered *second* and *third stage* stations.

Protocol Interface Cascading

Protocol Interface Cascading refers to cascading from a parent KVM switch to a child switch, where both switches uses the same data transfer protocol. In this type of cascade, the On Screen Displays (OSD) belonging to the separate switches are integrated so that when the consoles of the first stage switch invoke the OSD, all computers on the cascaded KVM installation are listed in the port directory.

The KM0832 can cascade up to three levels of KM0832 stations through Protocol Interface Cascading. It supports a maximum of 8,192 computers.

The maximum number of consoles on the first stage KM0832 that can simultaneously access computers attached to the cascaded KM0832 switches is dependent on the number of bus connections between each parent and child switch. A bus connection is established by connecting a CPU Port of the parent switch to a User Port of the child switch. The KM0832 supports a maximum of eight bus connections between parent and child switches.

In order for all eight consoles on the first stage KM0832 switch to simultaneously access the cascaded second and third stage switches, each parent KM0832 must make eight bus connections with each child switch that is cascaded from its ports. In other words, eight CPU Ports of the parent switch must be connected to eight User Ports of the child switch.

Note: Consoles in cascaded child stations cannot access ports in parent stations.

To set up a Protocol Interface Cascade, refer to the installation diagram on p. 21 and do the following:

1. Connect the console to the Console Module.

   Plug the keyboard, mouse, and monitor into the ports on the Console Module. Each port is marked with an identifying icon.

2. Connect the Console Module to the KM0832.

   Use Category 5 cable to connect the *Link* port of the Console Module to one of the User Ports on the KM0832's rear panel.

   (Repeat steps 1 and 2 for all consoles that you wish to connect. Up to 8 consoles may be connected in this fashion.)

Note: 1. The distance between any Console Module and any CPU Module, or any first stage and third stage stations (or second stage, if there is no third stage), must not exceed 300m (1000').

2. We strongly recommend that you use Category 5 shielded twisted pair (STP) cable.

3. Use Category 5 cable to connect up to eight CPU Ports on the first stage station to the User Ports on the second stage station. The number of consoles on the first stage KM0832 that can simultaneously access the cascaded switch is limited by the number of connections between the parent and child switches.

   (Repeat step 3 for each second stage switch that you wish to cascade. If you wish to cascade any third stage switches, follow the instructions in step 3 when cascading them from the second stage switches.)

4. Use Category 5 cable to connect CPU Modules to any available CPU Ports; plug the connectors of the CPU Modules into the keyboard, video, and mouse ports of the computers you wish to install.

5. Connect the power adapter(s) to the Console Module(s) and to an AC mains power source appropriate for the device.

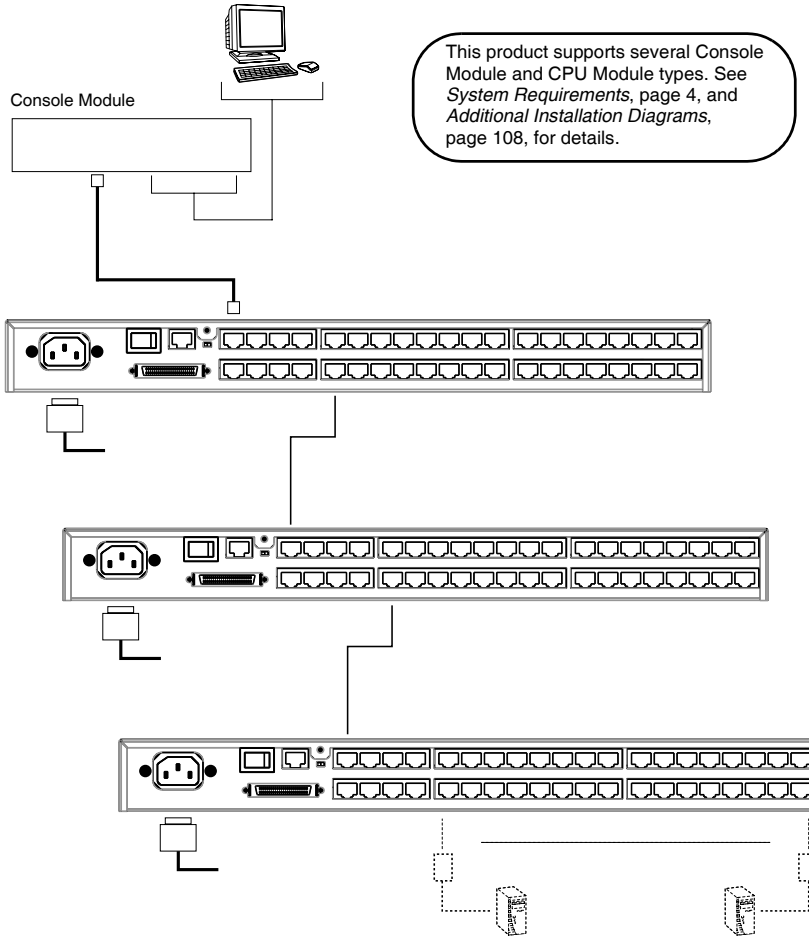
6. Plug the provided power cable into the power socket on the first stage KM0832 switch; connect the power cable to an AC mains power source with appropriate voltage for the KM0832, then turn on the KM0832.

7. Wait one minute, and then repeat step 6 for each second stage KM0832.

8. Wait one minute, and then repeat step 6 for each third stage KM0832.

9. Turn on the power to all the computers.

Protocol Interface Cascade Diagram


Console Module
This product supports several Console Module and CPU Module types. See *System Requirements*, page 4, and *Additional Installation Diagrams*, page 108, for details.

Daisy Chaining

Up to 7 additional KM0432 stations can be daisy chained to the KM0832 master station. The KM0832 is capable of supporting eight independent consoles, while each KM0432 is capable of supporting four independent consoles. The KM0832 must occupy the *master* (first) position in a daisy chained installation, while the KM0432 must be used as the *slave* station(s).

In a complete daisy chained installation, the eight consoles that belong to the KM0832 can access and control all of the computers on the installation. When accessing the daisy chained KM0432 switches, the KM0832 consoles use the KM0432 On Screen Display (OSD) to access the computers connected to the daisy chained KM0432 switches. The four consoles belonging to each slave switch (KM0432) only control the computers (up to 32) connected to their switch.

Note: If the daisy chain feature is not operative on your unit, you will need a newer version of the firmware. Contact your dealer for details.

To set up a daisy chained installation, refer to the diagram on page 24 and do the following:

1. Use a daisy chain cable set (described in the *Cables* section, p. 5), to connect the *Chain Out* port of the master KM0832 station to the *Chain In* port of the slave KM0432 station (first station out to second station in, second station out to third station in, etc.).

   Note: The KM0832 must occupy the master (first) position in a daisy chained installation, while the KM0432 must be used as the slave station(s).

2. If you wish to install any Console or CPU Modules on this switch, follow the procedures described in *Single Stage Installation* on p. 16.

   (Repeat the above steps for any additional KM0432 stations you wish to add to the chain.)

3. Plug the power cords into an AC mains power source and into the power sockets on the KM0832 and KM0432 stations.

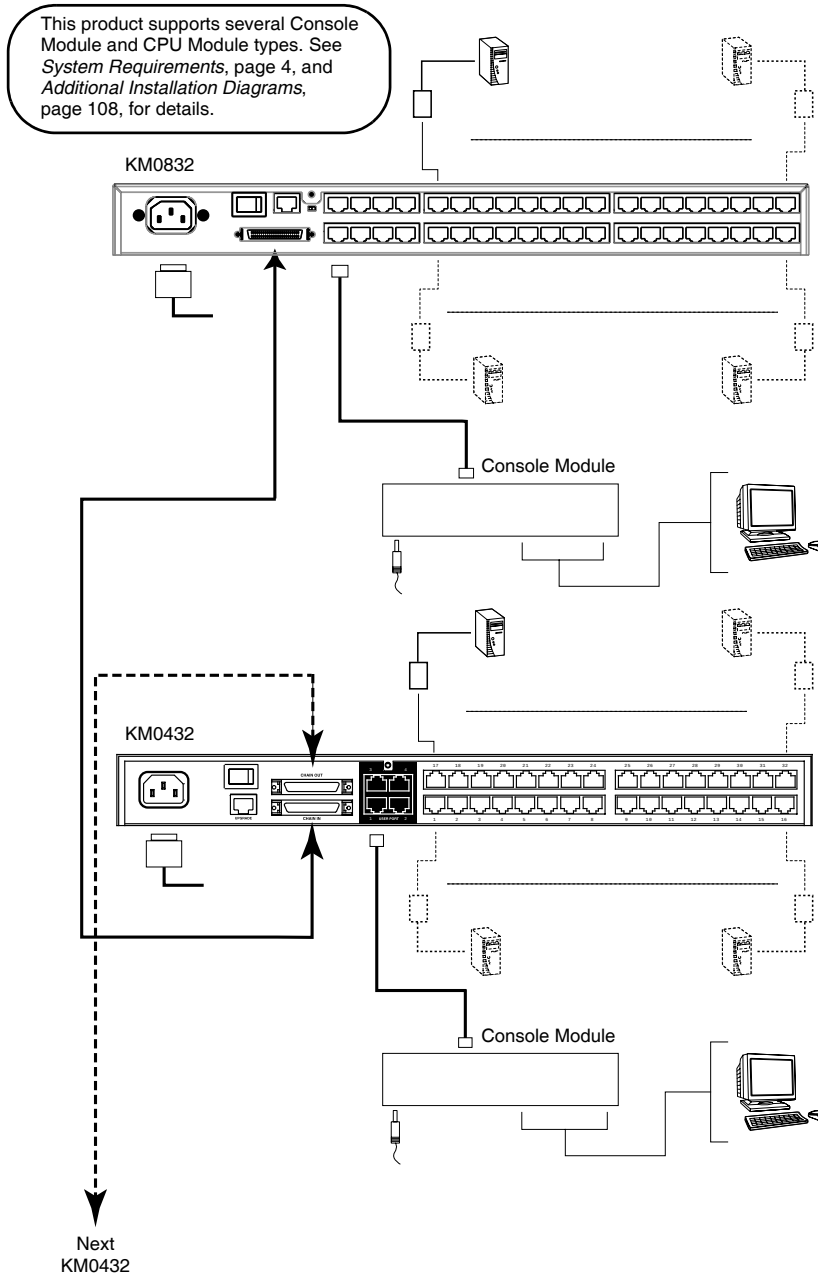
4. Power up the installation according to the following procedure:

   a) Switch on the power for the first station (KM0832). Wait one minute for the station to ascertain its station position. (The KM0832 does not have a Station ID because it always occupies the first station position.)

   b) Switch on the power for each station on the installation in turn (second station, then third station, etc.). In each case, wait for the station position to be ascertained and displayed on the current Station ID before powering on the next station. (The ID for the second stage station is **02**, the ID for the third stage station is **03**, etc.).

   c) After all the stations are up, power on the computers.

Daisy Chain Installation Diagram


This product supports several Console Module and CPU Module types. See *System Requirements*, page 4, and *Additional Installation Diagrams*, page 108, for details.
KM0832
Console Module
KM0432
Console Module
Next KM0432

Network Installation

Before you can configure the KM0832 settings (discussed in Chapter 3), you must first install the KM0832 on the Local Area Network (LAN).

To install the KM0832 on the LAN:

1. Locate the Configuration Port on the rear panel of the KM0832. (It has a standard RJ-45 connector like those used for Ethernet access ports.)
2. Use Category 5e or Category 6 cable to connect the Configuration Port to the LAN.

Topology Considerations

The use of RJ-45 CPU connectors, combined with Auto Signal Compensation (ASC), allow signals to travel up to 300 meters (1000 feet) and still maintain reliability and high video resolution. This allows the KM0832 installation to take advantage of the internal Category 5e and Category 6 wiring built-in to most modern commercial buildings.

Note: Although the KM0832 supports legacy Category 5 wiring, the performance and video quality may degrade over longer distances. We strongly recommend that you use Category 5 shielded twisted pair (STP) cable.

Since the data signals are not transmitted in packets, the transmission cannot go through network hubs or switches. Passive components such as patch panels, keystone jacks, patch cables, etc. can be used to channel the traffic, instead.

Basic Operations

Hot Plugging

The KM0832 supports *hot plugging*—components can be removed and added back into the installation by unplugging their cables from the ports without the need to shut the station down. In order for hot plugging to work properly, however, the procedures described below must be followed:

Switching Station Positions

On daisy chained installations, you can switch station positions by simply unplugging from the old parent and plugging into a new one.

Hot Plugging User Ports

The keyboard, monitor, and mouse all can be hot plugged. If you experience a problem after you plug in a new mouse, do a system reset by pressing the reset switch on the KM0832's front panel (see p. 7 for details). If this doesn't resolve the problem, restart the computers that have the problem.

Powering Off and Restarting

Powering off the KM0832 does not affect the computers attached to it. When you restart the KM0832, you will regain control immediately. To replace a KM0832, simply power it down, unplug the cables, plug them into the new station, and power the new station on.

Note: If any of the computers behave strangely after powering off and restarting, or changing a switch, simply restart the computer.

Port Selection

Port Selection is accomplished either by means of the KM0832's OSD (On Screen Display), or by entering Hotkey combinations from the keyboard. *OSD Operation* is discussed in detail in Chapter 4; *Hotkey Port Selection* is discussed in Chapter 5.

Although hotkeys are handy for a single stage installation, we strongly recommend you use the more powerful and versatile OSD—especially for cascaded and daisy chained installations.

Chapter 3
Administrator Utility

Overview

For your convenience the KM0832 Administrator Utility is provided to perform a multitude of administrative tasks. There is no software to install and it runs inside a web browser. Intuitive menus and icons enable administrators to quickly and efficiently manage users, groups, stations, and ports; configure network settings; upgrade firmware; and backup and restore configurations. After user accounts have been added, users can log in to the KM0832 Administrator Utility to change account passwords and configure their personal profiles.

In cascaded installations settings only need be configured for the root (first stage) station because the cascaded child stations get their settings from it.

Most of the features available in the KM0832 Administrator Utility (and a few more) are also available in the text-based OSD. Changes made in the KM0832 Administrator Utility are reflected in the text-based OSD and vice-versa.

Note: The KM0832 Administrator Utility supports up to seven user sessions at a time.

Setting the IP Address

The first time you access the KM0832 you should assign an IP address that is appropriate for your network. There are three methods that you can follow to do this: 1) set your computer's network adapter to the same subnet as the KM0832, log in, and then assign an IP address; 2) use the ATEN IP Installer to assign an IP address; or, 3) log in to the OSD and set the IP address.

Note: The default IP address of the KM0832 is *192.168.0.10*.

On the Same Network Segment

1. Set your computer so that it is on the same subnet as the KM0832. Your computer's IP address should be 192.168.0.*XXX*, where *XXX* represents any number from 1–253, except 10. (See *Factory Default Settings*, page 106, for complete default network settings.)
2. If you use a proxy server to access the LAN you should disable it in Microsoft® Internet Explorer.
3. In the URL bar of a web browser, enter 192.168.0.10. The *KM0832 Login* screen appears.
4. Assign an IP address for the KM0832 that is appropriate for the network segment on which it resides. (See *Network Configuration* on p. 36).
5. After logging out, reset your computer's network settings back to their original values.

Using the IP Installer

Go to the Altusen support site and select the webpage that is specific for the KM0832. From there you can download the IP Installer along with instructions on how to use it to assign an IP address to the KM0832.

From the OSD

1. From the console, open the OSD. Navigate to the IP Address Setting screen (see *SET NETWORK*, page 91).
2. Follow the instructions in this user manual to manually set the IP address or to view the current settings. (If DHCP is enabled, you will not be able to view the IP address.)

Logging In

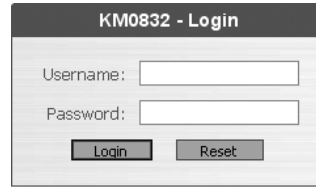
The browser-based KM0832 Administrator Utility is provided to configure settings for the KM0832.

The first time that the KM0832 is accessed, the default Super Administrator account must be used to log in. The default username is *ADMIN* and the default password is also *ADMIN*. This account cannot be deleted and it does not appear in the username list. The username cannot be changed; however, the password can be changed. ATEN strongly recommends that you change the password immediately; otherwise, your KVM switch and all connected servers are vulnerable to access by unauthorized users. See *Configuring OSD User Settings*, page 60, to change the default password.

Note: After other user accounts have been added to the KM0832, it is no longer necessary to use the default Super Administrator account to log in.

To log in to the KM0832 Administrator Utility:

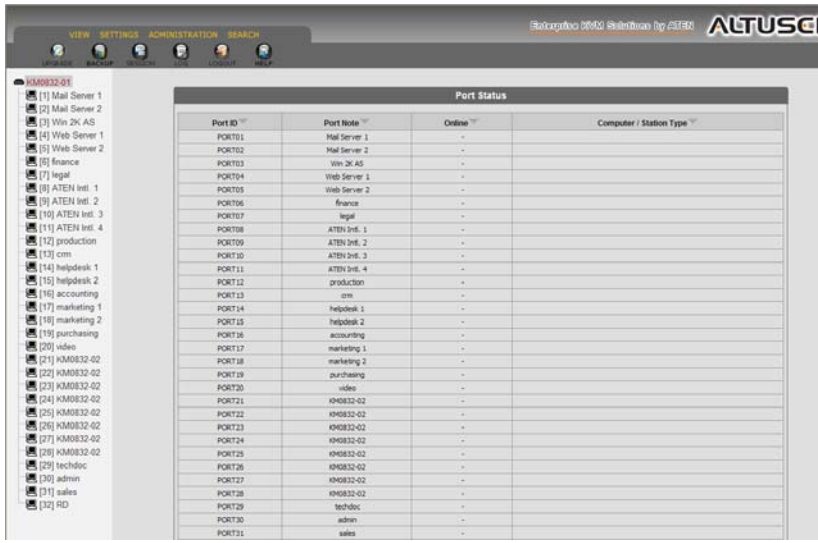
1. Enter the IP address for the KM0832 in the address bar of a browser and press **Enter**. The *KM0832 Login* screen appears.



2. Enter your username and password, and then click **Login**. (The username is not case-sensitive; however, the password is case-sensitive.)

(continues on next page)

Upon successfully logging in, the KM0832 Administrator Utility main screen appears.



KM0832 Administrator Utility

The KM0832 Administrator Utility is a convenient web-based graphical user interface that runs in most browsers. At the top of the KM0832 Administrator Utility main screen is a menu bar. Underneath the menu bar are several icons. Menus and icons are described in the following pages.

A tree is displayed at the left side of the main screen. The KM0832 *station* icon (at the top of the tree) represents the root node. Below it are thirty-two *computer* icons, which represent the child nodes—one for each port and arranged in ascending order. The child nodes are either computers or other KM0832 stations. If you click on a child node from which is cascaded another KM0832 Matrix KVM Switch, the *Port Status* page for that station appears. When you click on a computer icon the *Port Management* page for that port appears.

This chapter will focus on how to use the menus and icons to configure the KM0832 for local operation, set up user and group accounts, configure ports, upgrade firmware, etc.

Menus

The menu items at the top of the KM0832 Administrator Utility main screen are used to manage user accounts, group accounts, ports, and stations. Users also can set screen viewing options, specify OSD preferences, and change passwords. A search function allows the KM0832 stations and ports to be located by inputting Station Names and Port Notes. Super Administrators also access the pages to configure network settings, set the date and time and view system information here. The function of each menu item is described in the following table:

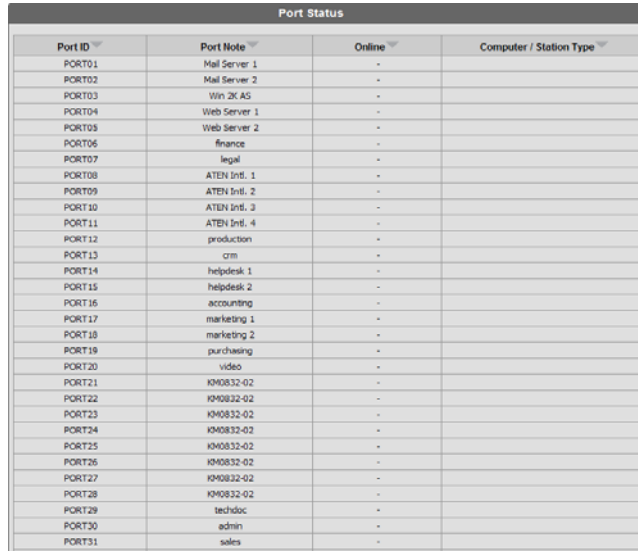
Menu Item	Description
View	Clicking the View menu opens the *View* page, which allows users to set screen viewing options.
Settings	Clicking the Settings menu opens the *Settings* page. It allows users to change their account passwords. The user also can set the OSD activation keys, time to logout, and screen blanker, as well as turn on and off both the hotkey commands and the beeper, and set the idle timeout.
Administration	Clicking the Administration menu opens a pop-up menu. From this menu, Administrators and Super Administrators can manage users, groups, ports and stations. In addition, Super Administrators can configure the network settings, set the date and time, and view the system information for the KM0832.
Search	Clicking the Search menu opens the *Search* page. Users can input key strings in order to search for computers and stations on the KM0832 installation.

Icons

Except for the Logout icon, the icons on the bar at the top of the KM0832 Administrator Utility main screen are only available for use by administrators. Only Super Administrators are allowed to upgrade firmware and view the Active Sessions page.

Icon	Description
Upgrade	Clicking the Upgrade icon brings up the Firmware Upgrade page. The Super Administrator can use this function to upgrade the firmware version.
Backup	Clicking the Backup icon opens the Backup and Restore Settings page. It allows the administrator to backup the system configuration to a local computer, or restore the system configuration to the station.
Session	Clicking the Session icon opens the Active Sessions page. This page allows Super Administrators to see information about all the users who are currently logged into the KM0832 and provides information about each of their sessions. It also gives Super Administrators the option of forcing a user logout.
Log	Clicking the Log icon opens the Event Log page, which allows administrators to view all of the events that took place on the KM0832 system.
Logout	Clicking the Logout icon closes the user's session.
Help	Clicking the Help icon opens the KM0832 help file.

Port Status



Port Status

Port ID	Port Note	Online	Computer / Station Type
PORT01	Mail Server 1	-	
PORT02	Mail Server 2	-	
PORT03	Win 2K AS	-	
PORT04	Web Server 1	-	
PORT05	Web Server 2	-	
PORT06	finance	-	
PORT07	legal	-	
PORT08	ATEN Intl. 1	-	
PORT09	ATEN Intl. 2	-	
PORT10	ATEN Intl. 3	-	
PORT11	ATEN Intl. 4	-	
PORT12	production	-	
PORT13	crm	-	
PORT14	helpdesk 1	-	
PORT15	helpdesk 2	-	
PORT16	accounting	-	
PORT17	marketing 1	-	
PORT18	marketing 2	-	
PORT19	purchasing	-	
PORT20	video	-	
PORT21	KM0832-02	-	
PORT22	KM0832-02	-	
PORT23	KM0832-02	-	
PORT24	KM0832-02	-	
PORT25	KM0832-02	-	
PORT26	KM0832-02	-	
PORT27	KM0832-02	-	
PORT28	KM0832-02	-	
PORT29	techdoc	-	
PORT30	admin	-	
PORT31	sales	-	

When you log in to the KM0832 Administrator Utility, the Port Status page displays by default. The information shown for each port depends on the port permissions granted to each user. Only ports for which the user has Full Access or View Only privileges are shown. Click on an arrow next to a category heading to sort port information by that category in ascending or descending order.

Column	Description
Port ID	Lists the CPU Port number.
Port Note	Displays the Port Note that was assigned to the port (if any). For information about Port Notes see *Configuring Port Settings*, page 56.
Online	Indicates whether the device attached to the port is powered on.
Computer / Station Type	Displays information about the CPU Module used to attach the computer to the port.

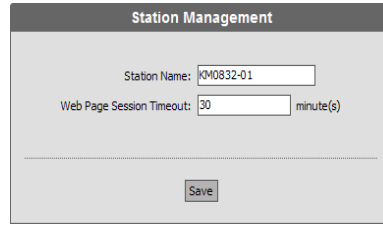
Naming Stations

Since the KM0832 can both daisy chain and cascade additional KVM switches, a single KVM installation may include numerous identical switches. To help distinguish one KVM switch from another, Super Administrators and Administrators can assign unique names to each KM0832.

Hint: If you are installing the KM0832 in a multiple KVM switch installation, give it a name immediately so that you will be able to easily identify it later.

To assign a station name to the KM0832:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Station Management*. The *Station Management* page appears.



3. Enter a unique name for the station that will differentiate it from all other stations on the KVM installation. For example, a first station switch in a cascade may be named 'KM0832-01'.
4. Click **Save**.

Setting the Webpage Session Timeout

The Webpage Session Timeout specifies the amount of time that a user may remain idle in the KM0832 Administrator Utility before the user's session is closed. Only 7 users can simultaneously login to the KM0832 Administrator Utility; therefore, you should set the Webpage Session Timeout number accordingly. The default Webpage Session Timeout is 30 minutes.

Note: If a user closes the browser without first logging out, the user's session will remain active for two minutes before it is closed.

To set the *Webpage Session Timeout* for the KM0832 Administrator Utility:

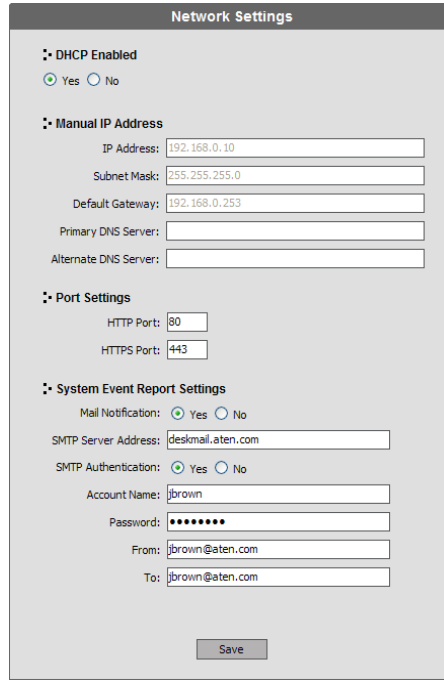
1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Station Management*. The *Station Management* page appears.
3. In the *Webpage Session Timeout* field, specify the number of minutes to elapse before an inactive user is timed out of the *KM0832 Administrator Utility*. Enter '0' to disable this function.
4. Click **Save**.

Network Configuration

Network Configuration is a Super Administrator function. After you log in to the KM0832 Administrator Utility, you should configure the network settings for the KM0832 on the LAN. Then, other users can locate the KM0832 on the LAN. Network settings are configured through the *Network Settings* page.

To open the *Network Settings* page:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Super Adm Configuration* > *Set Network*. The *Network Settings* page appears.



IP Address

The KM0832 has the option to manually enter a static IP address or to use a DHCP server on your network to dynamically assign an IP address.

To use a DHCP server to assign an IP address:

- Under *DHCP enabled*, click **Yes** to use a DHCP server.

To manually assign an IP address:

1. Under *DHCP enabled*, click **No**.
2. In the fields under *Manual IP address*, enter the IP address, subnet mask, default gateway, and primary DNS server. You also can enter an alternate DNS server; however, it is not required.

Hint: If you enable a DHCP server to assign an IP address to the KM0832, you should also enable *Mail Notification* so that the KM0832 can send an e-mail message to notify the recipient when the IP address changes.

Port Settings

You must enter the network ports that the KM0832 will use to transfer webpages and communicate with client programs. Typically, port 80 is used for Hyper Text Transfer Protocol (HTTP) communications, while port 443 is used for HTTPS (HTTP over Secure Socket Layer).

Note: You must assign a port number for each field. Otherwise, the KM0832 will not function correctly.

System Event Reports

The KM0832 can be configured to send an e-mail notification whenever the DHCP server assigns a new IP address to the KM0832. Enable the *Mail Notification* feature and specify the Simple Mail Transfer Protocol (SMTP) server address, information for a valid e-mail account on the server, and the e-mail address of the person to whom the message should be sent.

To enable system event reports:

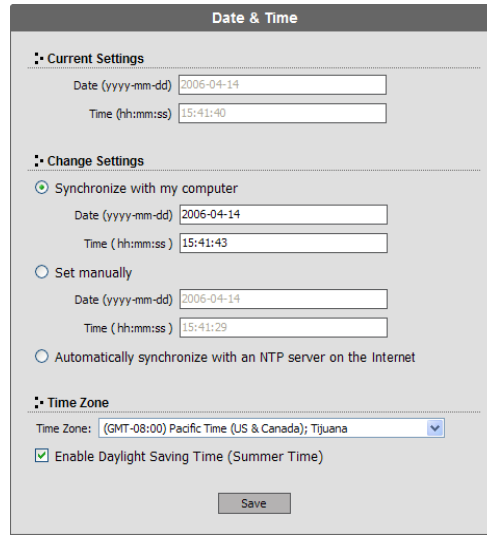
1. Under *System Event Report Settings*, click **Yes** to enable *Mail Notification*.
2. Enter the address of the SMTP server. If your server requires authentication, click **Yes** to enable *SMTP Authentication*.
3. In the *Account Name* field, enter the username for a valid e-mail account on the SMTP server in Step 2.
4. In the *Password* field, enter the password for the e-mail account in Step 3.
5. In the *From* field, enter the e-mail address for the e-mail account in Step 3.
6. In the *To* field, enter the e-mail address of the person to whom the notification message should be sent.
7. Click **Save**.

Setting the Date and Time

Super Administrators can set the date and time of the KM0832, which enables the *System Log*, *Active Sessions*, and *System Information* pages to maintain accurate time-sensitive data.

To set the date and time:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Super Adm Configuration* > *Date & Time*. The *Date & Time* page appears.



The current date and time of the KM0832 are shown at the top of the page.

(continues on next page)

3. Under *System Date & Time*, select one of the following three options to set the date and time.
   - *Synchronize with my computer*: Select this option to synchronize the date and time of the KM0832 with that of the computer that you are using to access it.
   - *Set manually*: Select this option to manually enter the date and time. You must enter the date and time in the following way:

     a) *Date*: Enter the date in Arabic numerals, year first, then the month, followed by the day. The year must carry four digit places, while the month and day each must carry two digit places. The year, month, and day each must be separated by a hyphen. For example, December 5th, 2005, should be written *2005-12-05*.

     b) *Time*: Use 24-hour notation to enter the time as hours:minutes:seconds. For example, three o'clock in the afternoon should be written *15:00:00*.
   - *Automatically synchronize with an NTP server on the Internet*: Select this option to synchronize the date and time of the KM0832 with that of a Network Time Protocol (NTP) server on the Internet. To use this feature you will need to open UDP port 123 in your firewall.
4. From the *Time Zone* drop down list, select the time zone of the region where the KM0832 resides.
5. Select *Daylight Saving Time (Summer Time)* if it is used in your region.
6. Click **Save**. Your settings are saved and the system date and time are updated.

Group Management

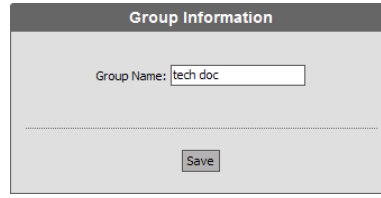
Super Administrators can create up to 256 groups on the KM0832, as well as modify and delete those groups. Grouping users together simplifies port management by enabling actions to be performed that affect a whole group of users, rather than only one. (You can still use the User Management page to change individual user account settings. See *User Management*, page 44.)

All group management operations start from the *Group Management* page. It shows all groups that have been created on the KM0832 and provides options for creating new groups and modifying or deleting existing groups.

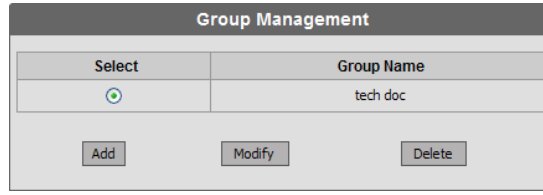
Adding Groups

To add a new group:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Account Management* > *Group Management*. If no groups have been created the *No Local Groups* page appears.
3. Click **New**. The *Group Information* page appears.



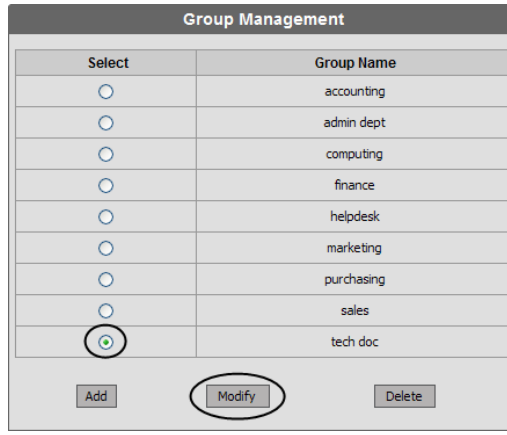
4. In the *Group Name* field enter the name of the group you wish to create. Group names are case-sensitive and limited to a maximum of 15 characters.
5. Click **Save**. The new group is added to the *Group Management* page.



Modifying Groups

To edit a group name:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Open the *Group Management* page.



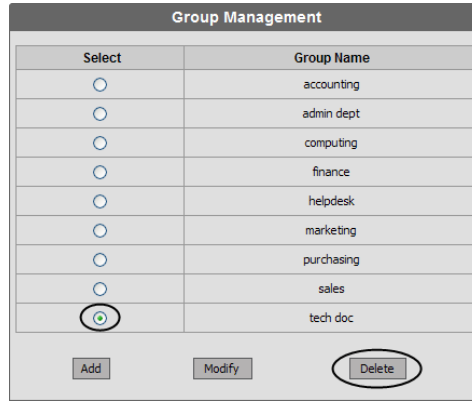
3. Select a group name and click **Modify**. The *Group Information* page appears.
4. In the *Group Name* field edit the group name.
5. Click **Save**. The *Group Management* page reflects the changes you made to the group name.

Deleting Groups

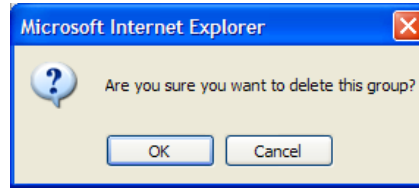
When you delete a group all users that are members of the group are also deleted. If you do not want to delete certain users in the group, first change the group membership of those users, and then delete the group.

To delete a group:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Open the *Group Management* page.



3. Select a group name and click **Delete**. The following dialog box appears:



4. Click **OK** to delete the group. The group name is removed from the *Group Management* page and all users in the group are deleted.

User Management

Super Administrators and Administrators can add, modify, and delete user accounts. Up to 1024 unique user accounts can be created on the KM0832 with no restriction on the number of any particular user type. In order for users to access the KM0832 through the local console or through the KM0832 Administrator Utility each user must have a user account. For each user account you must assign a username, password, user type, and group membership. Each user requires a valid username and password or the user will not be allowed to access the KM0832 either through the KM0832 Administrator Utility or through the OSD.

When creating user accounts you must add each user to a group. Therefore, we suggest that you create groups before users. If you do not wish to create groups you may add users to the default group account. However, the default group account cannot be used to grant port access to group members. In this case, you must individually add users to the port(s).

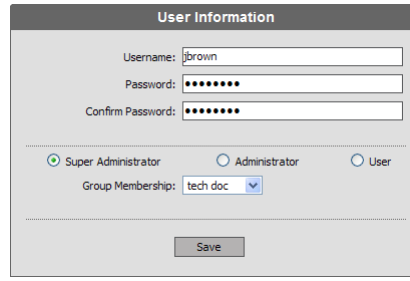
The *User Management* page is similar to the *Group Management* page. It shows all users that have been created on the KM0832 and their individual group memberships. It also provides options for creating new users and modifying or deleting existing users.

Adding Users

Super Administrators can add all account types, while Administrators can add other Administrators and Users.

To add a user account:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Account Management* > *User Management*. If no users have been created the *No Local Users* page appears.
3. Click **New**. The *User Information* page appears.



4. Enter the username for the new account. Usernames are limited to a maximum of 15 characters and are not case-sensitive.
5. Enter a password and then reenter the password to confirm it. Passwords are limited to a maximum of 15 characters and are case-sensitive.

Note: If no password is entered, the KM0832 (and all attached servers and switches) can be accessed with the username alone.

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6. Select an account type for the user.

User Type	Permissions
User	◆ Log in and log out ◆ Access only those port(s) for which the User has been granted port access rights ◆ Access *View* and *Settings* pages to configure account settings ◆ Use the *Search* function ◆ Open the KM0832 help file
Administrator	◆ All *User* permissions ◆ Full access to all ports, including those in cascaded stations ◆ Create, modify, and delete *User* and *Administrator* account types* ◆ Manage stations and ports* ◆ View and clear the log file* ◆ Back up and restore system configurations*
Super Administrator	◆ All *User* and *Administrator* permissions ◆ Create, modify, and delete all user account types* ◆ Create, modify, and delete group accounts* ◆ Configure network settings, set date and time, and view system information* ◆ Upgrade firmware* ◆ View and end sessions of Super Administrators, Administrators, and Users* ◆ Invoke Broadcast Mode (OSD)*

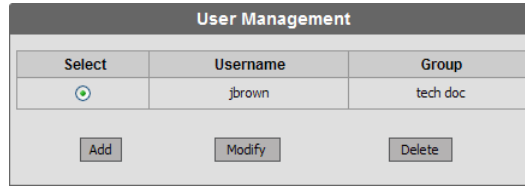
***** These permissions only apply to the station in which the user was originally created (usually the first station). See *Port Management*, page 50, for more information about administrator rights in cascaded stations.

(continues on next page)

7. Select a group membership for the user. If you do not wish to create a group membership for the user, then select the default group account.

Note: Each user account can have only one group membership.

8. Click **Save**. The new user is added to the *User Management* page.



Modifying User Accounts

Super Administrators can modify all account types, while Administrators can modify accounts of other Administrators and Users.

To edit a user account:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Open the *User Management* page.

3. Select a username and click **Modify**. The *User Information* page appears.
4. Edit the user account settings. (Leave the password fields blank to keep the same password.)
5. Click **Save**. The user account is updated.

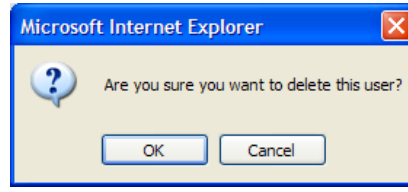
Deleting User Accounts

Super Administrators can delete all account types, while Administrators can delete other Administrators and Users.

To delete a user account:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Open the *User Management* page.

3. Select a username and click **Delete**. The following dialog box appears:



4. Click **OK** to delete the username. The username is removed from the *User Management* page.

Port Management

KM0832 port access rights for Users and groups are set on a port-by-port basis, giving administrators a high degree of control over which ports users can access and how they access the ports. To enable Users to access ports, you must first configure the user access rights for each port. By default, all Super Administrators and Administrators have full access to all ports.

Hint: Adding users to groups streamlines port configuration by allowing you to assign port access to entire groups at one time.

In this section we will discuss how to:

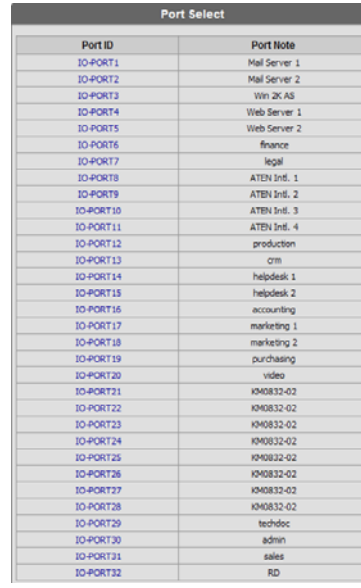
- Restore port defaults
- Set port access rights for users and groups
- Configure port settings and assign names to ports

Accessing Ports

All ports in the station are listed on the Port Select page. Use the button at the bottom of the page to restore station and port defaults.

To open the *Port Select* page:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Port Management*. The *Port Select* page appears.



The *Port Select* page is divided into two columns. Port IDs, or port numbers, are listed in the column on the left in ascending order. Click the Port ID to access the *Port Management* page for that port. If a port has been assigned a name, the name appears to the right of the Port ID in the Port Note column. The button at the bottom of the page is described in the table below.

Button	Description
Restore Defaults	Click to revoke port access for users and groups, remove Station Names and Port Notes, and restore factory default settings for Webpage Session Timeout, Port Operating System and Port Language. See *Factory Default Settings*, page 106.

Managing Port Access

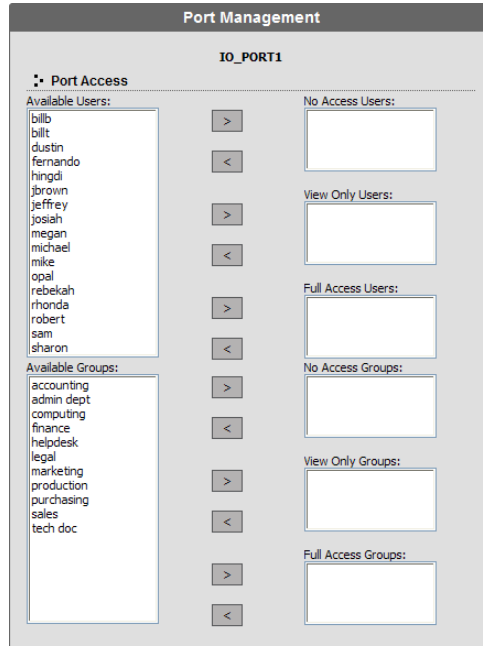
Each port has an individual *Port Management* page that is used to set port access rights, assign port names and configure other port settings. This also is true for cascaded child stations.

To open the *Port Management* page for a port:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. In the KM0832 tree on the left side of the main screen, click on a computer icon. Each computer icon corresponds to a KM0832 port. The *Port Management* page for that port appears. (See p. 30 for more information about using the *computer* icons.)

   -or-

   Open the *Port Select* page. Go to step 3.
3. In the Port ID column, click on a Port ID to open the *Port Management* page for that port. The *Port Management* page appears.



The upper section of the *Port Management* page is used to manage port access rights for users and groups. The boxes on the left side of the page show all users and groups that have been created. The boxes on the right side of the page govern port access rights. These boxes are discussed in the table below.

In the middle of the page are six sets of arrows. Each set contains two arrows: one facing leftward (<) and the other facing rightward (>), which correspond to the boxes immediately to the left and right, respectively. Arrows are used to move users and groups from the boxes on the left into the boxes on the right and vice versa.

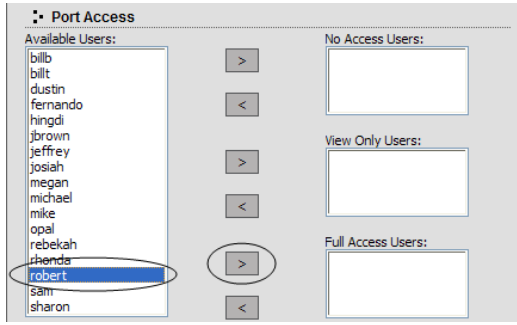
Box Name	Description
Available Users	All KM0832 Users listed in this box do not yet have permission to access the port. Although Super Administrators and Administrators also are listed here, they already have full access and do not need to be added to the ports.
Available Groups	All KM0832 groups are listed by group name in this box. Groups listed in this box do not have permission to access the port.
No Access Users	Users who are restricted from access to the port. Administrators can move certain users here to prevent others from accidentally granting port access to them. If a User in this box is a member of a group that has permission to access the port, placing the user in this box restricts the user from accessing the port.
View Only Users	Users who are only permitted to view video from the port.
Full Access Users	Users who are permitted both to view video from the port and to control the port. If a cascaded station is in the port, the User will not be able to access the ports of that station until granted access rights to the individual ports.
No Access Groups	Groups which are restricted from access to the port. Administrators can move certain groups here to prevent others from accidentally granting port access to them.
View Only Groups	Groups which are only permitted to view video from the port.
Full Access Groups	Groups which are permitted both to view video from the port and to control the port. If a cascaded station is in the port, the Group will not be able to access the ports of that station until granted access rights to the individual ports.

Note: 1. You cannot add more than 32 users and 32 groups to a port. If you need to add more than 32 users to a port, first add the users to groups and then add those groups to the port.

2. If a user is granted both user and group access rights to the same port, the user access rights will be applied and not those of the group.

To grant port access rights to users or groups:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Open the *Port Management* page for the port where you wish to grant access rights.

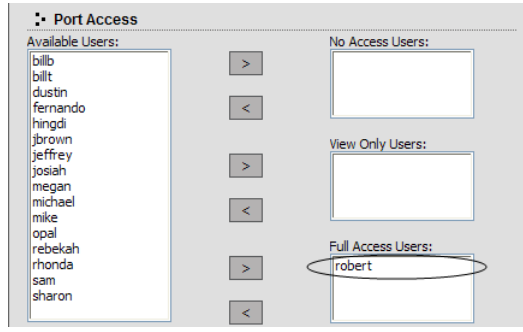


3. In the *Available Users* box, click on a username to highlight it.

   -or-

   In the *Available Groups* box, click on a group name to highlight it.

   Click the appropriate rightward facing arrow (>) to move the selected user (or group) to the box on the right that corresponds to the access rights that you wish to grant to the user (or group). The user (or group) appears in the access rights box.



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Repeat Steps 2 and 3 until you have assigned port access rights (or restrictions) for all users and groups.

If you make a mistake by adding a user or group to the wrong access rights box, simply highlight the username (or group name) again and then click the corresponding leftward facing arrow. The selected user (or group) is removed from the box and put back into its former position.

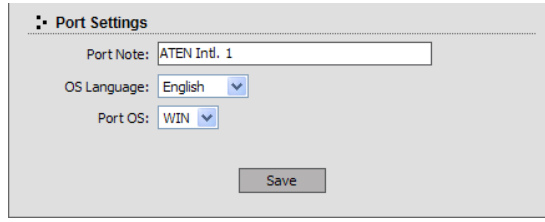
4. Click **Save**. The selected users (or groups) are given the permissions that were assigned in the last step.

Cascaded Installations

Super Administrators and Administrators have full access to all ports in cascaded child stations; however, they have no system administrative rights. To give Users access to ports in cascaded child stations, first grant them access to the port to which the cascaded station is attached, and then grant access to the individual ports in the child station just as you would in the main station.

Configuring Port Settings

The fields in the lower section of the *Port Management* page are described in the table below.



Field	Description
Port Note	Enter a unique name or comment that will identify the port. The Port Note will appear on the *Port Status* and *Port Select* pages, in the KM0832 tree next to the *computer* icon, and in the OSD. In some browsers, using spaces in the Port Note will cause it to display on multiple lines in the tree view.
OS Language	The KM0832 supports three keyboard language layouts: U.S. English, French, and Japanese.
Port OS	The KM0832 supports three operating platforms: Windows, Mac, and Sun.

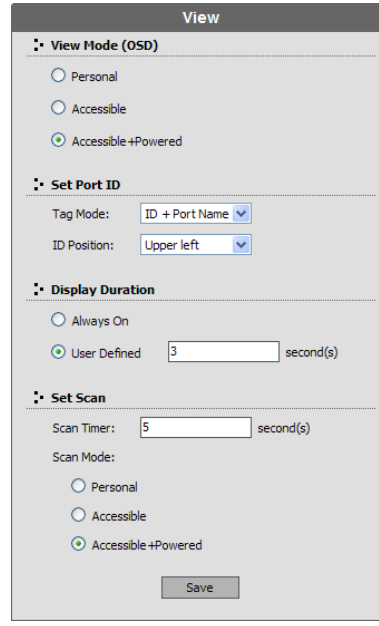
Note: Before you configure port settings, first verify that the CPU Module for the port you wish to configure is connected to the correct CPU Port on the back panel of the KVM switch; otherwise, settings will not be saved.

Setting the OSD View

After you create accounts for users, those users can log in to the KM0832 Administrator Utility. From there, they can set the On Screen Display (OSD) view settings for their accounts. This includes selecting the ports that will appear in the OSD port list; the type, position and duration of the Port ID display; and the scan mode and scan duration. (The OSD is discussed in Chapter 4.)

To open the *View* page:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **View** menu. The *View* page appears.



View Mode

Many of the OSD functions only operate on the computers that are currently listed (displayed) on the OSD Main Screen. Use this function to broaden or narrow the scope of ports that are listed. The submenu choices and their meanings are given in the table below:

Choice	Meaning
Personal	The OSD lists the ports that the user has set as personal. See *SET PERSONAL VIEW* on p. 81.
Accessible	The OSD lists only those ports that the user is permitted to access. See *Managing Port Access* on p. 52.
Accessible + Powered	The OSD lists only those ports that the user is permitted to access and that have their attached computers powered on.

Set Port ID

When a user switches ports from the OSD, a port ID is shown. The table below explains the choices:

Choice	Meaning
Tag Mode	Selects how the Port ID is displayed: the Port Number alone (**ID**); the Port Note alone (**Port Name**); or the Port Number plus the Port Note (**ID + Port Name**). The default is ID + Port Name.
ID Position	Allows you to position where the Port ID appears on the monitor. The default is the upper left corner, but you can make it appear anywhere on the screen.

Display Duration

Display Duration determines the length of time that the Port ID displays on the screen after a port change. The table below explains the choices:

Choice	Meaning
Always On	Displays the Port ID at all times.
User Defined	Lets you select the amount of time (from 1–255 seconds). The default is 3 seconds. A setting of 0 (zero) disables this function.

Set Scan

Select the ports that are viewed under Auto Scan Mode and the duration of time that they receive the KVM focus.

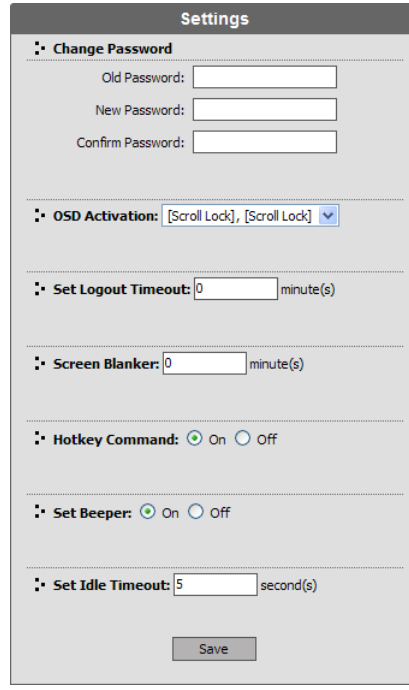
Setting	Function
Scan Timer	Determines how long the KVM focus dwells on each port as it cycles through the selected ports in Auto Scan Mode (see *F7 SCAN*, p. 94). Key in a value from 1–255 seconds. The default is 5 seconds; a setting of 0 disables the Scan function.
Scan Mode	Selects which computers will be accessed under Auto Scan Mode (see *F7 SCAN*, p. 94). Choices are: **Personal**—Only those ports that the user has set as personal. See *SET PERSONAL VIEW* on p. 81. **Accessible**—Only those ports that the user is permitted to access. See *Managing Port Access* on p. 52. **Accessible + Powered**—Only those ports that the user is permitted to access and that have their attached computers powered on. The default is Accessible + Powered**.**

Configuring OSD User Settings

This function allows the user to change the account password and set up a unique working environment. A separate profile for each user is stored by the OSD and is activated according to the *Username* that is provided during login.

To open the *Settings* page:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Settings** menu. The *Settings* page appears. (The OSD settings are explained in the table on the next page.)



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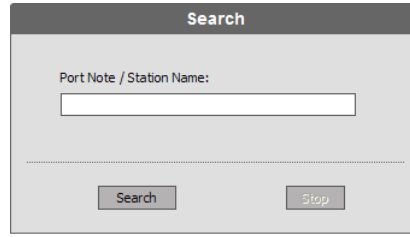
Setting	Function
Change Password	Enter the old account password. Enter a new password, and then reenter the password to confirm it. Or, do not enter anything to leave the password unchanged.
OSD Activation	Selects which Hotkey activates the OSD function: [Scroll Lock] [Scroll Lock] or [Ctrl] [Ctrl]. Since the Ctrl key combination may conflict with programs running on the computers, the default is the Scroll Lock combination.
Set Logout Timeout	This function allows you to specify the number of minutes to elapse before an inactive user is timed out of the OSD. If there is no input from the user for the specified amount of time, the user will be logged out automatically.
Screen Blanker	If there is no input from the console for the amount of time set with this function, the screen is blanked. Key in a value from 1–30 minutes, then press [Enter]. A setting of 0 disables this function. The default is 0 (disabled).
Hotkey Command	Enables / Disables the Hotkey Command function in case a conflict with programs running on the computers occurs. The default is enabled.
Set Beeper	When set to ON, the beeper sounds whenever the port is switched, when activating the Auto Scan function (see p. 94), or when an invalid entry is made on an OSD menu. The default is ON.
Set Idle Timeout	If there is no input from the console accessing a particular port for the amount of time set with this function, the port is released, allowing it to be accessed by the other consoles. To set the timeout value, key in a number from 0–255 seconds, then press [Enter]. If the number is 0 [zero], this function is disabled. The default is 5 seconds.

Search

The *Search* function provides a convenient method to easily locate ports and cascaded stations by Port Note or Station Name.

To search for a port:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Search** menu. The *Search* page opens.



3. In the field, enter the Port Note of the port for which you are searching; or, enter the Station Name of a cascaded station. All entries that match or contain the search term(s) appear in a list.

Note: You do not need to enter the entire Port Note; a partial Port Note is acceptable. For example, if you want to search for a port with Port Note **WIN 2K AS**, you only need enter a portion of the Port Note, i.e. **WIN**. The same applies when searching for stations.

Firmware Upgrade

Super Administrators can upgrade firmware for the KM0832 as well as for attached Console Modules and CPU Modules. If there are any directly cascaded KM0832 switches, they are also upgraded at the same time. As new versions of the KM0832 firmware become available, they can be downloaded from our website. Check the website regularly to find the latest information and packages.

Before You Begin

To prepare for the firmware upgrade:

1. From a computer that is not part of your KVM installation go to the Altusen website and choose the model name that relates to your device. A list of available Firmware Upgrade Packages appears.
2. Choose the Firmware Upgrade Package that you want to install (usually the most recent) and download it to your computer.
3. From that computer, open your browser and log in to the KM0832 (see *Logging In* on p. 29).
4. Shut down all of the computers—but not the Stations—on your KVM installation.

Performing the Upgrade

To upgrade the firmware:

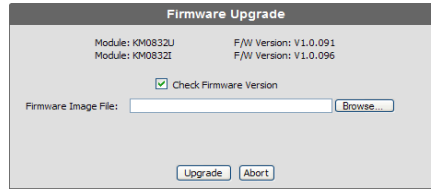
1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Upgrade** icon. The following dialog box appears:

Microsoft Internet Explorer
When you are upgrading firmware, other users cannot access this device. Are you sure you want to upgrade firmware?
OK
Cancel

3. Click **OK** to enter Firmware Upgrade Mode. A message will be sent to OSD users with active sessions to notify them that they should logout because you are about to upgrade the firmware.

Note: If you click OK and later decide to abort the firmware upgrade, you must power off and then power on the KM0832.

The *Firmware Upgrade* page appears. It displays the current firmware version(s) of the KM0832 module(s).



4. Click **Browse**. The *Open* dialog box appears.
5. Navigate to the directory where the new Firmware Upgrade Package file was saved and select the file. The path and filename appear in the *Firmware Image File* field.

(continues on next page)

6. Select or deselect *Check Firmware Version*.
   - If you select *Check Firmware Version*, the Utility compares the firmware level of the KM0832 with that of the upgrade files. If it finds that the current firmware version of the KM0832 is higher, a dialog box appears that gives you the option to Continue or Cancel.
   - If you do not select *Check Firmware Version*, the Utility installs the upgrade files without comparing the version levels.
7. Click **Upgrade** to begin upgrading the firmware.

   -or-

   Click **Abort** to cancel the firmware upgrade. You must power off and then power on the KM0832.

Note: It takes approximately 7 minutes to upgrade the firmware for a single stage installation, or 17 minutes for a cascaded installation. Please be patient while the firmware is upgrading.

8. After the firmware upgrade completes, log out to reset the KM0832.

Upgrade Failed

If a device fails to complete the upgrade successfully, start the firmware upgrade procedure again (see p. 64).

Firmware Upgrade Recovery

If the firmware upgrade procedure is aborted prematurely (due to a power outage, for example), the switch that was being upgraded at the time may become inoperable, and may be incapable of accepting a normal firmware upgrade.

To recover from a failed firmware upgrade:

1. Slide the unit's *Firmware Upgrade Recovery Switch* (see p. 8), to the RECOVER position.
2. Perform a system reset (see *System Reset Button* on p. 7). The switch is now ready to be upgraded.
3. Slide the Recovery Switch back to the NORMAL position.
4. Start the firmware upgrade procedure again (see p. 64).

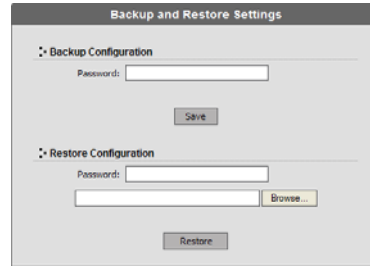
Backup and Restore Configurations

Super Administrators and Administrators can back up KM0832 system configurations to a file and later restore them to the system. There are several cases where this is useful: 1) to back up system settings before making changes, 2) if you install multiple KM0832 switches in separate installations and you want to use the same settings, 3) if the KM0832 has a problem and needs to be replaced, and 4) when upgrading to a newer version of the KM0832.

Action	Description
Backup	Backs up root station settings, user and group accounts, user profiles, port access rights, and shortcuts.
Restore	Deletes the current root station settings, user and group accounts, user profiles, port access rights, and shortcuts and restores those saved in the configuration backup file.

To back up system configurations:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Backup** icon. The *Backup and Restore Settings* page appears.



3. Under *Backup Configuration*, enter a password for the backup configuration file if you want password protect it; otherwise, leave this field blank. There are no restrictions on characters that can be used in passwords.

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4. Click **Save**. The *File Download* dialog box appears.
5. Click **Save**. The *Save As* dialog box appears.
6. Navigate to the directory where you want to save the file and click **Save**. The backup configuration file is saved in the directory.

To restore system configurations:

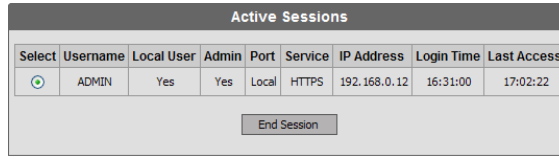
1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Backup** icon. The *Backup and Restore Settings* page appears.
3. Under *Restore Configuration*, enter the password that you used to password protect the backup configuration file. If you did not password-protect the file leave this field blank.
4. Click **Browse**. The *Choose file* dialog box appears.
5. Navigate to the directory where the configuration backup file was saved and select the file. The path and filename appear in the field.
6. Click **Restore**. The backup configuration file settings replace all current settings. When the configurations are finished restoring the KM0832 will reboot. A message will be sent to OSD users with active sessions to notify them that configurations are being restored and that the system will reboot.

Viewing and Ending User Sessions

The KM0832 lists all users who are currently logged in to the KM0832 Administrator Utility and shows details about their sessions. If a user account is misused or if another user needs to login to the KM0832 Administrator Utility, Super Administrators can view and end the sessions of other Super Administrators, Administrators and Users. However, users with active sessions in the KM0832 OSD are not listed on this page and their sessions cannot be ended.

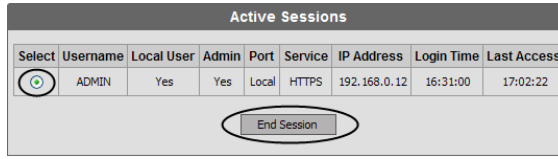
To view current user sessions:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Session** icon. The *Active Sessions* page appears. It displays information about the users who have active sessions in the KM0832 Administrator Utility.



To end a user session:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Session** icon. The *Active Sessions* page appears.



3. Select the user for whom you wish to end the session, and click **End Session**. The user is logged out of the KM0832 and the username no longer appears on the Active Sessions page.

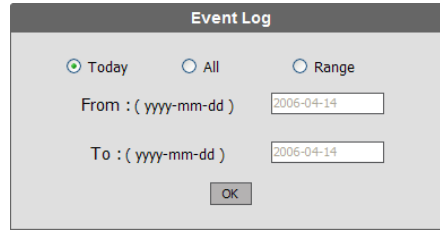
   Repeat Step 3 for each user that you want to log out of the KM0832.

Viewing and Clearing the Log File

The log file is a record of events that happen in the KM0832 Administrator Utility. It records events such as system boot up and when important administrative changes are made. Each entry is recorded with the date and time that the event happened. User log ins and log outs are also recorded, and in addition to the date and time, also include the user's username and IP address. Only Super Administrators and Administrators can view and clear the log file.

To view the log file:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Log** icon. The *Event Log* page appears.



3. Select one of the following three ways to view log file events:
   - Today: Select this option to view only events that happened today.
   - All: Select this option to view all events in the log file.
   - Range: Select this option to view events that happened during a period of two or more days. Enter the beginning date of the period in the *From* field and the ending date in the *To* field. You must enter the date in Arabic numerals, year first, then the month, followed by the day. The year must carry four digit places, while the month and day each must carry two digit places. The year, month, and day each must be separated by a hyphen. For example, December 5th, 2005, should be written *2005-12-05*.

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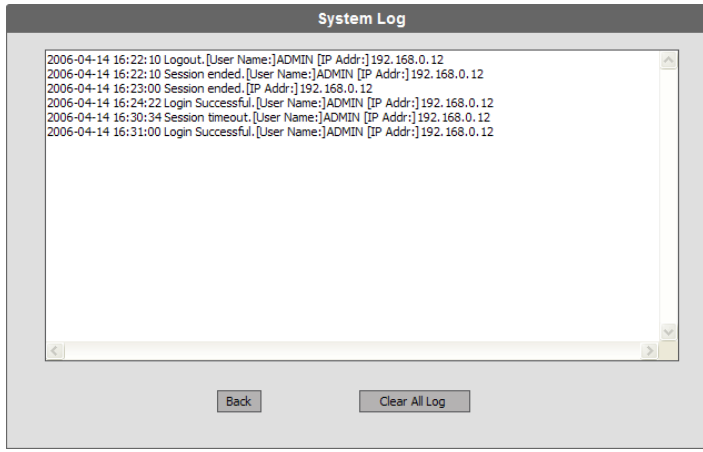
4. Click **OK**. The *System Log* page appears.


System Log
2006-04-14 16:22:10 Logout.[User Name:]ADMIN [IP Addr:]192.168.0.12
2006-04-14 16:22:10 Session ended.[User Name:]ADMIN [IP Addr:]192.168.0.12
2006-04-14 16:23:00 Session ended.[IP Addr:]192.168.0.12
2006-04-14 16:24:22 Login Successful.[User Name:]ADMIN [IP Addr:]192.168.0.12
2006-04-14 16:30:34 Session timeout.[User Name:]ADMIN [IP Addr:]192.168.0.12
2006-04-14 16:31:00 Login Successful.[User Name:]ADMIN [IP Addr:]192.168.0.12
Back
Clear All Log

Each line in the log file is a record of an event that occurred in the KM0832 Administrator Utility during the period of time that you specified on the *Event Log* page. The log file keeps up to 4095 events in memory. Once that amount is reached, the oldest events are discarded as new events are recorded. In the case that an unforeseen event happens, such as a power outage, if the log file is full at the time, when the KM0832 is restarted the log file will only show the most recent 2048 lines.

5. Click **Back** to return to the *Event Log* page.

To clear the contents of the log file:

If you delete the contents of the log file you cannot recover them; however, this will not affect future log events.

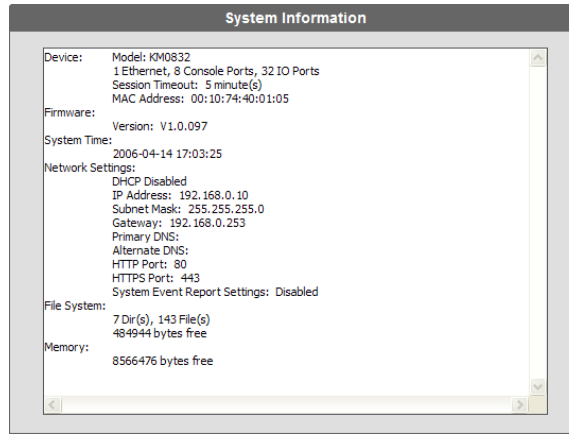
1. Follow Steps 1–4 for viewing the log file.
2. At the bottom of the *System Log* page, click **Clear All Log**. All events in the log file are deleted.

Viewing System Information

Super Administrators can view information about the KM0832 system through the *System Information* page. It shows information about the device, firmware version, system time, network settings, and the file system.

To view system information:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. From the *Administration* menu, choose *Super Adm Configuration* > *System Information*. The *System Information* page appears.



3. If you are not able to view some of the information, use the scroll bar to scroll down until you can view it.

Viewing the Help File

The help file contains information about most of the functions of the KM0832 Administrator Utility.

To open the help file:

1. If you are not logged in to the KM0832 Administrator Utility, then open the KM0832 Login page and login. The KM0832 Administrator Utility main screen will appear.
2. Click the **Help** icon. The *KM0832 Help* screen appears.

Logging Out

Click the *Logout* icon to end sessions in the KM0832 Administrator Utility. If a user closes the browser without first logging out, the user's session will remain active for two minutes before it is closed. For security reasons we recommend that you either close your web browser or clear the browser cache after logging out.

Chapter 4
OSD Operation

OSD Overview

The KM0832 On Screen Display (OSD) provides a visual, menu-driven, mouse-enabled, interface that offers quick and convenient computer access and control, as well as efficient system administration including user management (access rights, passwords, etc.). Changes made in the OSD are reflected in the KM0832 Administrator Utility and vice-versa.

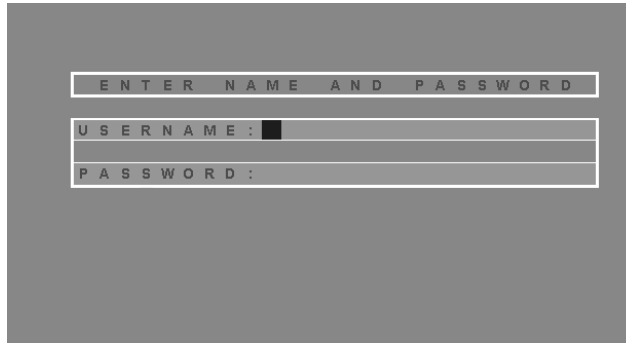
Each OSD menu option activates a function that configures and controls the operation of the KVM installation. All procedures start from the OSD Main Screen.

To open the OSD Main Screen:

1. Tap the **Scroll Lock** key twice.

Note: [Scroll Lock] is the default OSD hotkey. You can optionally change the Hotkey to the Ctrl key (see *OSD ACTIVATION*, p. 83, for details).

The login screen appears:

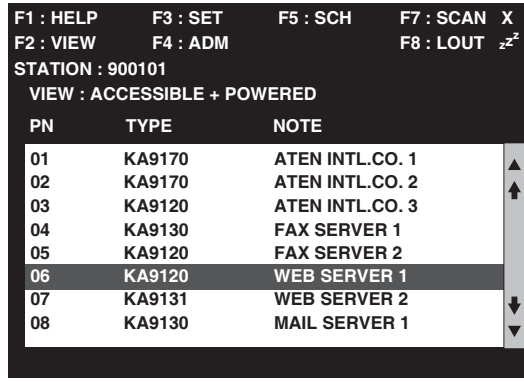


2. Key in a valid username and password, then press [Enter].

Note: The first time that you (or anyone else) log in to the KM0832 OSD, you must use the default Super Administrator account. The default username is *ADMIN* and the default password is also *ADMIN*. This

account can neither be deleted nor does it appear in the username list. The username cannot be changed; however, the password can be changed. We strongly recommend that you change the password immediately; otherwise, your KVM switch and all connected servers are vulnerable to access by unauthorized users. See *Configuring OSD User Settings*, page 60, to change the default password. After other user accounts have been added to the KM0832, it is no longer necessary to use the default Super Administrator account to log in.

After you log in, a screen similar to the one below appears:



Note: 1. The diagram depicts the Super Administrator's Main Screen. The User Main Screen does not show the **F4** function, since it is reserved for Super Administrators and Administrators. Normal users cannot access it.

2. The OSD always starts in List view, with the highlight bar at the same position it was in the last time it was closed.

3. Only the ports that have been set accessible by the (Super) Administrator for the currently logged in User are visible (see *PORT ACCESS*, p. 87, for details).

OSD Main Screen Headings

Heading	Explanation
PN	This column lists the Port Numbers for all the CPU Ports on the installation. The simplest method to access a particular computer is to move the highlight bar to it and press [Enter].
TYPE	The model number of the CPU Module used to connect the computer to the port.
NOTE	If a port has been given a name (see *SET PC NOTE*, p. 89), its name appears in this column.

OSD Navigation

Use the following procedures to navigate through OSD menus:

- To dismiss the Main Screen, and deactivate the OSD, click the **X** at the upper right corner of the OSD Window; or press [Esc].
- To Logout, click **F8** at the top of the Main Screen, or press [F8].
- To move up or down through the list one line at a time, click the Up and Down Triangle symbols (▲▼) or use the Up and Down Arrow Keys. If there are more list entries than there is room for on the Main Screen, the screen will scroll.
- To move up or down through the list one screen at a time, click the Up and Down Arrow symbols (🡅🡇), or use the [Pg Up] and [Pg Dn] keys. If there are more list entries than there is room for on the Main Screen, the screen will scroll.
- To select a computer, double-click it; or, move the highlight bar to it, then press [Enter].
- After executing any action, you automatically go back to the menu one level above.

Port ID Numbering

Each CPU Port on a KM0832 installation is assigned a unique Port ID. You can access and control any computer on the installation by specifying the Port ID of the port that it is connected to. Depending on where the computer is on the installation, its Port ID will have either two or three parts.

Cascaded Protocol Interface Installations

The Port ID for computers on Protocol Interface cascaded installations is made up of two or three parts, depending on the number of levels of cascaded switches:

- The *Port Number* on the root KM0832 station
- The *Port Number* on the second level KVM switch (if applicable)
- The *Port Number* on the third level KVM switch (if applicable).

For example, a computer attached to **Port 6** of a child KM0832 that is cascaded from **Port 15** of a child KM0832, which in turn is cascaded from **Port 8** of the root KM0832, would have a Port ID of: **8-15-6**.

OSD Functions

OSD functions configure and control the OSD. Examples of what can be accomplished with the OSD include: rapidly switching to any port; auto scanning specifically selected ports; limiting the list of ports you wish to view; managing port names; user management, system administration, and making OSD setting adjustments.

To access an OSD function:

1. Click a function key field at the top of the Main Screen.

   -or-

   Press a function key on the keyboard.

2. In the submenus that appear, double-click on a choice.

   -or-

   Move the highlight bar to the choice, and then press [Enter].

3. Click or press [Esc] to return to the previous menu level.

To change a setting:

1. Double-click it.

   -or-

   Move the highlight bar to it, and then press [Enter].

2. After you select an item, a submenu with further choices appears. To make a selection, repeat Step 1 above. An icon appears before the selected choice.

Note: All setting changes are stored in temporary memory and remain in effect for the duration of your session. Changes only become permanent when you log out of the OSD (see p. 95). If you shut down the KM0832 without first logging out, your changes are discarded.

A complete description of the KM0832's OSD operations are given in the sections that follow.

F1: HELP

Click or press [F1] to access Help. It gives a brief description about each OSD function. It also displays information about the user, such as username, group membership, and the console the user is operating.

To return to the OSD Main Screen, click or press [Esc].

F2: VIEW

Many of the OSD functions only operate on the computers that are currently displayed (listed) on the Main Screen. This function lets you broaden or narrow the scope of which ports the OSD lists on the Main Screen. The submenu choices and their meanings are given in the table below.

Setting	Function
VIEW MODE	Allows you to select which computers are listed in the OSD Main Screen. Choices are: **PERSONAL**—The OSD lists the ports that the user has set as personal. See *SET PERSONAL VIEW* (below). **ACCESSIBLE**—The OSD lists only those ports that the user is permitted to access. See *PORT ACCESS*, p. 87. **ACCESSIBLE + POWERED**—The OSD lists only those ports that the user is permitted to access and that have their attached computers powered on. The default is ACCESSIBLE + POWERED.
SET PERSONAL VIEW	If there are KM0832 switches cascaded from the ports of the master switch, you can create shortcuts to the computers of those lower level switches that will appear in the OSD list. **To add a shortcut:** 1. Select ADD SHORTCUT. A box appears. 2. Enter the port ID number of the computer for which you wish to create a shortcut (e.g. 1-1-1). For a discuss on port ID numbering see p. 78. **To delete a shortcut:** 1. Select DELETE SHORTCUT. A list of shortcuts appears. 2. From the list, select the shortcut that you wish to delete. 3. Press [Y] to confirm; or, press [N] to cancel.

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Setting	Function
SET PORT ID	A submenu appears with three selections: **ID POSITION**—Allows you to position where the Port ID appears on the monitor. The default is the upper left corner, but you can have it appear anywhere on the screen. Use the Mouse or the Arrow Keys plus Pg Up, Pg Dn, Home, End, and 5 (on the numeric keypad with Num Lock off, to position the Port ID display, then double-click or press [Enter] to lock the position and return to the View submenu. **DISPLAY DURATION**—Determines how long a Port ID displays on the monitor after a port change has taken place. The choices are: USER DEFINED—which lets you select the amount of time (from 1–240 sec.); and ALWAYS ON—which displays the Port ID at all times. If you select *User Defined*, key in the number of seconds, then press [Enter]. The default is 3 Seconds. A setting of 0 (zero) disables this function. **DISPLAY MODE**—Selects how the Port ID is displayed: the Port Number plus the Port Name (PORT NUMBER + PC NAME); the Port Number alone (PORT NUMBER); or the Port Name alone (PC NAME). The default is PORT NUMBER + PC NAME.
SET SCAN	**SCAN INTERVAL**—Determines how long the focus dwells on each port as it cycles through the selected ports in Auto Scan Mode (see *F7 SCAN*, p. 94). Key in a value from 1–240 seconds, then press [Enter]. The default is 5 seconds; a setting of 0 disables the Scan function. **SCAN MODE**—Selects which computers will be accessed under Auto Scan Mode (see *F7 SCAN*, p. 94). Choices are: PERSONAL—Only those ports that the user has set as personal. See *SET PERSONAL VIEW* on p. 81. ACCESSIBLE—Only those ports that the user is permitted to access. See *PORT ACCESS*, p. 87. ACCESSIBLE + POWERED—Only those ports that the user is permitted to access and that have their attached computers powered on. The default is Accessible + Powered.

F3: SET

This function allows the user to change the account password and set up a unique working environment. A separate profile for each user is stored by the OSD and is activated according to the *Username* that is provided during login. The settings are explained in the following table:

Setting	Function
CHANGE PASSWORD	Enables the user to change the account password. Enter the old account password in the top field. Enter a new password in the middle field, and then reenter the password in the bottom field to confirm it. Press enter to save changes and return to the previous menu.
OSD ACTIVATION	Selects which Hotkey activates the OSD function: [Scroll Lock] [Scroll Lock] or [Ctrl] [Ctrl]. Since the Ctrl key combination may conflict with programs running on the computers, the default is the Scroll Lock combination.
SET LOGOUT TIMEOUT	If there is no input from the console for the amount of time set with this function, the Operator is automatically logged out. A login is necessary before the console can be used again. This enables other Operators to gain access to the computers when the original Operator is no longer accessing them, but has forgotten to log out. To set the timeout value, key in a number from 1–180 minutes, then press [Enter]. If the number is 0 [zero], this function is disabled. The default is 0 (disabled).
SCREEN BLANKER	If there is no input from the console for the amount of time set with this function, the screen is blanked. Key in a value from 1–30 minutes, then press [Enter]. A setting of 0 disables this function. The default is 0 (disabled).
HOTKEY COMMAND MODE	Enables / Disables the Hotkey Command function in case a conflict with programs running on the computers occurs. The default is enabled. Choices are Y (for Yes), or N (for No).

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Setting	Function
SET BEEPER	When activated, the beeper sounds whenever a port is changed, when activating the Auto Scan function (see *F7 SCAN*, p. 94), or an invalid entry is made on an OSD menu. The default is Y (activated). Choices are Y (for Yes), or N (for No).
IDLE TIMEOUT	If there is no input from the console accessing a particular port for the amount of time set with this function, the port is released, allowing it to be accessed by the other consoles. To set the timeout value, key in a number from 0–255 seconds, then press [Enter]. If the number is 0 [zero], this function is disabled. The default is 5 seconds.
RESTORE USER DEFAULT	Selecting this restores the original factory default settings for *VIEW* and *SET* for the user profile. Choices are Y (for Yes), or N (for No). (This feature is not available from the KM0832 Administrator Utility.)

F4: ADM

F4 is a Super Administrator and Administrator only function. It allows them to configure and control the overall operation of the OSD.

Note: When creating user accounts you must add each user to a group. Therefore, we suggest that you create groups before users. If you do not wish to create groups you may add users to the default group account. However, the default group account cannot be used to grant port access to group members. In this case, you must individually add users to the port(s).

ACCOUNT MANAGEMENT

Setting	Function
CREATE GROUP	Opens the NEW GROUP NAME field. Enter a name for the new group, and then press [Enter]. The group name may be up to 15 characters long, and can consist of any combination of letters and numbers (A–Z, 0–9).
MODIFY GROUP	Lists all groups. Select the group name that you wish to modify. Edit the group name, and then press [Enter].
DELETE GROUP	Lists all groups. Select the group name that you wish to delete. Press [Y] to confirm; or, press [N] to cancel.
CREATE USER ACCOUNT	1. The group list appears. 2. From the list, select the group to which you wish to add the new user. 3. Enter a username and a password for the account; reenter the password to confirm it, and then press [Enter]. The username and password may be up to 15 characters long, and can consist of any combination of letters and numbers (A–Z, 0–9). The User Type list appears. 4. Select a User Type for the account: User (NORMAL USER), Administrator (ADM), or (SUPER ADM). (Only Super Administrators can grant Super Administrator user rights to other users.)

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Setting	Function
MODIFY USER ACCOUNT	Allows you to modify the user account settings. Choices are: RESET USER PASSWORD, CHANGE USER TYPE, and CHANGE USER GROUP. **To change a user's account password:** 1. Select RESET USER PASSWORD. The user list appears. 2. From the list, select the user for whom you wish to change the password. 3. Enter the new password; reenter the new password to confirm it, and then press [Enter]. The password is changed. **To change a user's User Type:** 1. Select CHANGE USER TYPE. The user list appears. 2. From the list, select the user for whom you wish to change the User Type. 3. Select the new User Type, and then press [Esc] to exit. The User Type is changed. **To change a user's group membership:** 1. Select CHANGE USER GROUP. The user list appears. 2. From the list, select the user for whom you wish to change the group membership. The group list appears. 3. From the list, select the group to which you wish to add the user. The user is removed from the original group and added to the new group.
DELETE USER ACCOUNT	Opens the user list. Select the user that you wish to delete. Press [Y] to confirm; or, press [N] to cancel.

PORT MANAGEMENT

Setting	Function
PORT ACCESS	This function allows the Administrator to define group and user access to the computers on the installation on a port-by-port basis. Select a port from the list to manage user and group access to the port. A list appears with the following choices: ADD GROUP, SET GROUP ACCESS TYPE, DELETE ACCESS GROUP, ADD USER, SET USER ACCESS TYPE, and DELETE ACCESS USER. **To grant port access to a group:** 1. Select ADD GROUP. The group list appears. 2. From the list, select the group to which you wish to grant access to the port. 3. Press [Y] to confirm; or, press [N] to cancel. **To set the Group Access Type:** 1. Select SET GROUP ACCESS TYPE. A list of all groups that have been added to the port appears. 2. From the list, select the group for which you wish to set the Group Access Type. 3. Set the Group Access Type: NONE—No port access; VIEW—group members can only view video from the port; FULL—group members can view video from the port and control the port. **Note:** If NONE is set, the port will not show up in the group members' port lists on the OSD Main Screen. 4. Press [Esc] to exit. The Group Access Type you selected is assigned to the group. **To revoke group access for a port:** 1. Select DELETE ACCESS GROUP. A list of all groups that have been added to the port appears. 2. From the list, select the group for which you wish to revoke access to the port. 3. Press [Y] to confirm; or, press [N] to cancel.

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Setting	Function
PORT ACCESS (cont.)	**To grant port access to a user:** 1. Select ADD USER. The user list appears. 2. From the list, select the user to whom you wish to grant access to the port. 3. Press [Y] to confirm; or, press [N] to cancel. **To set the User Access Type:** 1. Select SET USER ACCESS TYPE. A list of all users who have been added to the port appears. 2. From the list, select the user for whom you wish to set the User Access Type. 3. Set the User Access Type: NONE—no port access; VIEW—users can only view video from the port; FULL—users can view video from the port and control the port. **Note:** If NONE is set, the port will not show up in the user's port list on the OSD Main Screen. 4. Press [Esc] to exit. The User Access Type you selected is assigned to the user. **To revoke user access for a port:** 1. Select DELETE ACCESS USER. A list of all users that have been added to the port appears. 2. From the list, select the user for whom you wish to revoke access to the port. 3. Press [Y] to confirm; or, press [N] to cancel.

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Setting	Function
SET PC NOTE	To help remember which computer is attached to a particular port, every port can be given a name. This function allows the Administrator to create, modify, or delete Port Notes. **To edit a Port Note:** 1. Click the port you want, or use the Navigation Keys to move the highlight bar to it, then press [Enter]. 2. Key in the new Port Note, or modify/delete the old one. The maximum number of characters allowed for the Port Note is 15. Legal characters include: ◆ All alpha characters: a–z; A–Z ◆ All numeric characters: 0–9 ◆ Spacebar Case does not matter; the OSD displays the Port Note in all capitals no matter how they were keyed in. 3. When you have finished editing, press [Enter]. The new name appears in the PORT NOTE field. To abort the change, press [Esc].
SET PORT LANGUAGE	This function allows the Administrator to define the keyboard language layout for each port. The default is U.S. ENGLISH. **To set the port language:** 1. From the list, select the port for which you wish to set the computer's keyboard language layout. 2. Set the keyboard language layout: US ENGLISH, JAPANESE, or FRENCH. 3. Press [Esc] to exit. The keyboard language layout you selected is assigned to the port.
SET PORT OPERATING SYSTEM	This function allows the Administrator to define the operating platform for the computer connected to each port. The default is WINDOWS (PC compatible). **To set the port operating system:** 1. From the list, select the port for which you wish to set the computer's operating platform. 2. Set the operating platform: WINDOWS, MAC, or SUN. 3. Press [Esc] to exit. The operating platform you selected is assigned to the port.

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Setting	Function
RESTORE PORT DEFAULT	This function revokes port access for users and groups, removes the Station Name and Port Notes, and restores original factory default settings for Port Operating System and Port Language. See *Factory Default Settings*, page 106.

STATION MANAGEMENT

Setting	Function
CREATE STATION NOTE	This function allows Administrators to assign a name to the KM0832 station, which helps to distinguish identical stations on a multiple station KVM installation.
DELETE STATION NOTE	This function allows Administrators to delete a Station Note.

SYSTEM INFORMATION

Setting	Function
SYSTEM INFORMATION	This function differs from the *System Information* screen in the KM0832 Administrator Utility. It displays a list of all KM0832 Modules, as well as connected Console Modules and CPU Modules. Important information about each device is shown in the list, such as the console or port number to which the device is attached, the device type, the original firmware version and the most recent firmware upgrade version.

SADM CONFIGURATION

Only the Super Administrator can view and control the functions under this menu.

Setting	Function
SET NETWORK	This function allows Administrators to configure the network settings for the KM0832 on the Local Area Network (LAN). A submenu appears with the following choices: HTTP PORT, HTTPS PORT, AUTOMATIC IP ADDRESS, and IP ADDRESS SETTING. **To set the HTTP port:** 1. From the list, select HTTP PORT. 2. Key in the port number (typically port 80), and press [Enter]. **To set the HTTPS port:** 1. From the list, select HTTPS PORT. 2. Key in the port number (typically port 443), and press [Enter]. **To enable dynamic IP addressing with a DHCP server:** 1. From the list, select AUTOMATIC IP ADDRESS. 2. Press [Y] to enable; or, press [N] to disable. **Note:** The default is enabled. If you disable this feature, then you should manually configure the IP settings. **To manually configure the IP settings:** 1. From the list, select IP ADDRESS SETTING. A list appears with the following choices: IP ADDRESS, SUBNET MASK, GATEWAY, PRIMARY DNS SERVER, and ALTERNATE DNS SERVER. 2. Select each choice and enter the numerical address (dotted quad address), and then press [Enter]. **Note:** These settings do not apply if you enable DHCP.
SET CLOCK	This function allows Administrators to configure the date and time for the KM0832. A submenu appears with the following choices: SET DATE and SET TIME. **To set the date and time:** 1. From the list, select SET DATE. In the field that appears, enter the date in *YYYY-MM-DD* format, and then press [Enter]. 2. From the list, select SET TIME. In the field that appears, enter the time in *HH:MM:SS* format, and then press [Enter].

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Setting	Function
BROADCAST	Selecting BROADCAST invokes Broadcast Mode. When this function is in effect, commands sent from the console are broadcast to all available computers on the installation. This function is particularly useful for operations that need to be performed on multiple computers, such as performing a system wide shutdown, installing or upgrading software, etc. Broadcast Mode works in conjunction with the *VIEW MODE* function (under F2:VIEW). The VIEW MODE function (see p. 81) is used to broaden or narrow the focus of which ports appear on the OSD Main Screen. When you Broadcast a command, it only goes to the ports currently listed on the OSD Main Screen. ◆ While Broadcast Mode is in effect, a *speaker* symbol appears before the Port ID Display of the port that currently has the console focus. ◆ While Broadcast Mode is in effect, the mouse will not function normally. You must exit Broadcast Mode in order to regain control of the mouse. ◆ To exit Broadcast Mode, invoke the OSD (with the OSD Hotkey), then select BROADCAST to turn Broadcast Mode off.

F5: SCH

The *Search* function provides a convenient method to easily locate ports and cascaded stations by their Port Notes.

To search for a port:

1. From the OSD Main Screen, press or click [**F5**].
2. In the field that appears, enter the Port Note of the port for which you are searching. All Port Notes that match or contain the search term(s) appear in a list.

Note: You do not need to enter the entire Port Note; a partial Port Note is acceptable. For example, if you want to search for a port with Port Note **WIN 2K AS**, you only need enter a portion of the Port Note, i.e. **WIN**.

F7: SCAN

This function allows you to automatically switch among the available computers at regular intervals so that you can monitor their activity without having to take the trouble of switching yourself.

- The selection of computers to be included for Auto Scanning is made with the *SCAN MODE* setting under the **F2 SET** function (see *SET SCAN* on p. 82).
- The amount of time that each Port displays for is set with the *SCAN INTERVAL* setting under the **F2 SET** function (see *SET SCAN* on p. 82). When you want to stop at a particular location, press the [Spacebar] or [Esc] to stop scanning and exit *Auto Scan Mode*.
- If the scanning stops on an empty port, or one where the computer is attached but is powered Off, the monitor screen will be blank, and the mouse and keyboard will have no effect. Simply wait—after the *Scan Duration* time is up, the Scan function will switch to the next port.
- As each computer is accessed, an **S** appears in front of the Port ID display to indicate that it is being accessed under *Auto Scan Mode*.
- While Auto Scan Mode is in effect, the console will not function normally. You must exit Auto Scan Mode in order to regain control of the console.
- While you are in Auto Scan Mode, you can pause the scanning in order to keep the focus on a particular computer either by pressing **P**, or with a Left click of the mouse. See *Invoking Auto Scan*, p. 100, for details.
- While you are in Auto Scan Mode, press **[←]** to switch to the previous computer in the List; press **[→]** to switch to the next computer in the List. After the amount of time set with the *SCAN INTERVAL* elapses, the Scan function will switch to the next port.

  When you Skip, you only Skip to the previous or next available computer that is in the *Scan Mode* selection (see p. 82).
- To exit Auto Scan Mode, press the [Spacebar] or [Esc].

F8: LOUT

LOUT (Log Out) logs you out of OSD control of the computers, and blanks the console screen. This is different from simply pressing [Esc] to deactivate the OSD when you are at the Main Screen. With this function you must log in all over again to regain access to the OSD, whereas with [Esc], all you have to do to reenter the OSD is tap the OSD Hotkey.

Note: 1. When you reenter the OSD after logging out, the screen stays blank except for the OSD Main Screen. You must input your password before you can continue.

2. If you reenter the OSD after logging out, and immediately use [Esc] to deactivate the OSD without having selected a port from the OSD menu, a Null Port message displays on the screen. The OSD Hotkey will bring up the Main OSD Screen.

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Chapter 5
Hotkey Operation

Hotkey Port Control

Hotkey Port Control allows you to provide KVM focus to a particular computer directly from the keyboard.

Note: Hotkeys work best in single stage and basic cascaded or daisy chained installations. For installations that combine daisy chaining and cascading, it is simpler, more convenient, and more efficient to use the OSD.

The KM0832 provides the following Hotkey Port Control features:

- Selecting the Active Port
- Auto Scanning
- Skip Mode Switching

Invoking Hotkey Mode

All Hotkey operations begin by invoking Hotkey Mode (HKM). Invoking HKM takes three steps:

1. Hold down the **Num Lock** key
2. Press the ***** key or the - (minus) key
3. Simultaneously release both keys

   `[Num Lock] + [* ]`

   or:

   `[Num Lock] + [- ]`

When HKM is active:

- The Caps Lock, and Scroll Lock LEDs flash in succession to indicate so. They stop flashing and revert to normal status when you exit HKM.
- A Command Line appears at the bottom of the monitor screen. The command line prompt is the word *Hotkey:* in white text on a blue background. Text that you key in while in HKM displays here.
- Ordinary keyboard and mouse functions are suspended—only Hotkey compliant keystrokes and mouse clicks (described in the sections that follow), can be input.
- Pressing [Esc] or [Spacebar] exits HKM.

Selecting the Active Port

Each CPU Port is assigned a Port ID (see *Port ID Numbering*, p. 78). You can directly access any computer on the installation with a Hotkey combination that specifies the Port ID of the CPU Port that the computer is connected to. The steps involved are:

1. Invoke HKM (see p. 97).
2. Key in the Port ID

   The Port ID numbers display on the Command Line as you key them in. If you make a mistake, use [Backspace] to erase the wrong number.
3. Press [Enter]

   After you press [Enter], the KVM focus switches to the designated computer and you automatically exit HKM.

Auto Scanning

Auto Scan switches among all the CPU Ports that are accessible to the current Operator at regular intervals (see *SCAN MODE* under *SET SCAN*, p. 82, for information regarding accessible ports). This function is convenient for automatically monitoring the activity of the computers on the installation.

Setting the Scan Interval:

The amount of time Auto Scan focuses on each port is set with the *SCAN INTERVAL* setting of the OSD **F2 SET** function (see *SET SCAN* on p. 82). You can change the scan interval before activating Hotkey Auto Scanning, if you wish, with the following Hotkey combination:

1. Invoke HKM (see p. 97).
2. Key in [T] [n]

   Where [T] is the letter **T**, and [n] is a number from 1–255 that represents the number of seconds for the dwell time.

   The letter **T** and the numbers display on the Command Line as you key them in. If you make a mistake, use [Backspace] to erase the wrong number.
3. Press [Enter]

   After you press [Enter], you automatically exit HKM, and are ready to invoke Auto Scanning.

Invoking Auto Scan:

To start Auto Scanning, key in the following Hotkey combination:

1. Invoke HKM (see p. 97).
2. Press [A].

   After you press **A**, you automatically exit HKM, and enter Auto Scan Mode, and Auto Scanning begins.

   - While you are in Auto Scan Mode, you can pause the scanning in order to keep the focus on a particular computer either by pressing **P** or with a Left Click of the mouse. During the time that Auto Scanning is paused, the Command Line displays: **Auto Scan: Paused.**

     Pausing and *Exiting* are the two ways to stop scanning and keep the focus on a particular computer. If you intend to continue scanning after a brief stop, *Pausing* is more convenient than *Exiting* Auto Scan Mode completely.

     This is because when you Resume scanning after Pausing, you start from where you left off. On the other hand, if you Exit and then restart Auto Scan, you start over from the very first computer on the installation.

     To *Resume* Auto Scanning after you Pause, press any key or left-click. Scanning continues from where it left off.

   - While you are in Auto Scan Mode, press **[←]** to switch to the previous computer in the List; press **[→]** to switch to the next computer in the List. After the amount of time set with the *SCAN INTERVAL* elapses, the Scan function will switch to the next port.

     When you Skip, you only Skip to the previous or next available computer that is in the *Scan Mode* selection (see p. 82).

   - While Auto Scan Mode is in effect, ordinary keyboard and mouse functions are suspended—only Auto Scan Mode compliant keystrokes and mouse clicks can be input. You must exit Auto Scan Mode in order to regain normal control of the console.

3. To exit Auto Scan Mode press **[Esc]** or **[Spacebar]**. Auto Scanning stops when you exit Auto Scan Mode.

Hotkey Beeper Control

The Beeper (see *SET BEEPER*, p. 84) can be Hotkey toggled On and Off. To toggle the Beeper, key in the following Hotkey combination:

1. Invoke HKM (see p. 97).
2. Press [B]

After you press **B**, the Beeper toggles On or Off. The Command Line displays *Beeper On* or *Beeper Off* for one second; then the message disappears and you automatically exit HKM.

Hotkey Summary Table

[Num Lock] + [*****] or [Num Lock] + [-]	[Port ID] [Enter]	Switches access to the computer that corresponds to that Port ID.
	[T] [n] [Enter]	Sets the Auto Scan interval to **n** seconds—where **n** is a number from 1–255.
	[A]	Invokes Auto Scan Mode. When Auto Scan Mode is in effect, [P] or Left Click pauses Auto Scanning. When Auto Scanning is paused, pressing Any Key or another Left Click resumes Auto Scanning.
	[←]	Skips from the current port to the first accessible port previous to it.
	[→]	Skips from the current port to the next accessible port.
	[B]	Toggles the Beeper On or Off.

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Chapter 6
Keyboard Emulation

The PC compatible keyboard can emulate the functions of the Mac and Sun keyboard. The emulation mappings are listed in the tables that follow.

Mac Keyboard Emulation

PC Keyboard	Mac Keyboard
[Shift]	Shift
[Ctrl]	Ctrl
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Alt]	Alt
[Print Screen]	F13
[Scroll Lock]	F14
	=
[Enter]	Return
[Backspace]	Delete
[Insert]	Help
[Ctrl]	F15

Note: When using key combinations, press and release the first key [Ctrl], then press and release the activation key.

Sun Keyboard Emulation

PC Keyboard	Sun Keyboard
[Ctrl] [T]	Stop
[Ctrl] [F2]	Again
[Ctrl] [F3]	Props
[Ctrl] [F4]	Undo
[Ctrl] [F5]	Front
[Ctrl] [F6]	Copy
[Ctrl] [F7]	Open
[Ctrl] [F8]	Paste
[Ctrl] [F9]	Find
[Ctrl] [F10]	Cut
[Ctrl] [1]	
[Ctrl] [2]	
[Ctrl] [3]	
[Ctrl] [4]	
[Ctrl] [H]	Help
	Compose
	◆

Note: 1. When using key combinations, press and release the first key [Ctrl**]**, then press and release the activation key.

2. If you need to go into OK Mode, which requires Stop + A, see *Troubleshooting*, p. 113.

Appendix

Specifications

Function		KM0832
Computer Connections	Direct	32
	Max	8,192
Console Connections		8
Port Selection		OSD (On Screen Display), Hotkeys
Connectors	Consoles	8 x RJ-45 female
	Computers	32 x RJ-45 female
	Daisy Chain	1 x HDB-50 female
	Configuration	1 x RJ-45 female
	Maintenance	1 x RJ-45 female
	Power	1 x 3 pin AC power jack
Switches	Reset	1 x push button (semi-recessed)
	Power	1 x rocker switch
	F/W Upgrade Recovery	1 x slide switch
	User Port 1	1 x slide switch
LEDs	User Port (On Line)	8 (green)
	CPU Port (On Line/Selected)	32 dual-colored (green/red)
	Power	1 (blue)
I/P Rating		100–240V, 50/60Hz; 1A
O/P Rating		110V/60Hz 19W; 220V/50Hz 20W
Emulation	Keyboard/Mouse	PS/2; Sun; USB (PC, Sun, Mac); serial
Scan Interval		1–255 seconds
Video		1024x768@60Hz (300m max.); DDC2B
Environment	Operating Temperature	0–50^{o} C
	Storage Temperature	-20–60^{o} C
	Humidity	0–80% RH, non-condensing
Physical Properties	Housing	Metal
	Weight	4.9 kg
	Dimensions (L x W x H)	43.8 x 38 x 4.4 cm

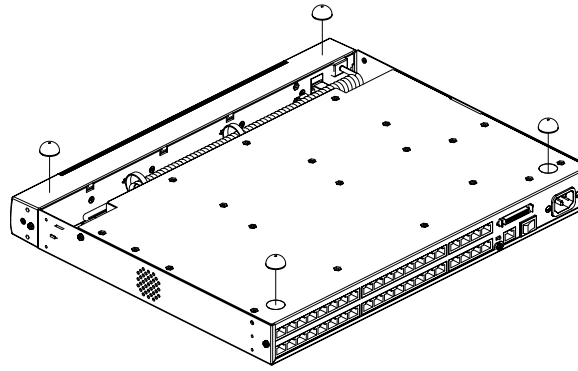
Factory Default Settings

The factory default settings are as follows:

Setting	Default
View Mode	Accessible + Powered
Port ID Display Mode	The Port Number plus the Port Name
Port ID Display Position	Upper Left Corner
Port ID Display Duration	User Defined (3 seconds)
Scan Duration	5 seconds
Scan Mode	Accessible + Powered
OSD Hotkey	[Scroll Lock] [Scroll Lock]
Logout Timeout	0 (Disabled)
Screen Blanker	0 (Disabled)
Hotkey Command Mode	On (Enabled)
Beeper	On (Activated)
Idle Timeout	5 seconds
Port Note	None
Port Operating System	Windows (PC compatible)
Port Language	U.S. English
Port Access	None (Super Administrators and Administrators have full access)
Webpage Session Timeout	30 minutes
IP Address	192.168.0.10
Subnet Mask	255.255.255.0
Default Gateway	192.168.0.254
HTTP Port	80
HTTPS Port	443
DHCP Enabled	No (Disabled)
SMTP Server Mail Notification	No (Disabled)
Date & Time	Synchronize with my computer
Daylight Saving Time	Enabled

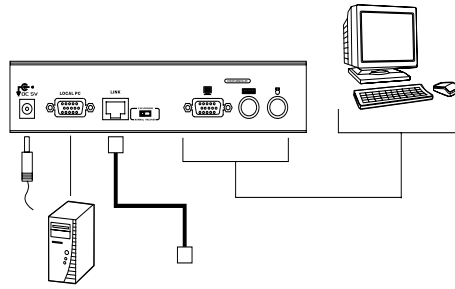
Optional Desktop Installation

If you do not wish to rack mount the KM0832, a foot pad set is included with the unit. Peel the protective backing off of the foot pads and then affix the foot pads to the bottom of the KM0832 in the locations shown in the diagram below.

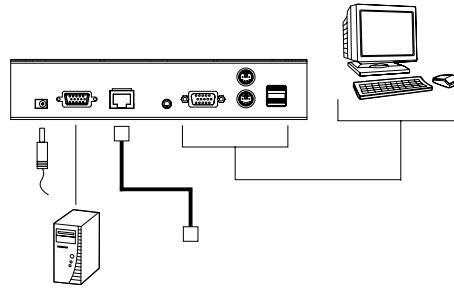


Additional Installation Diagrams

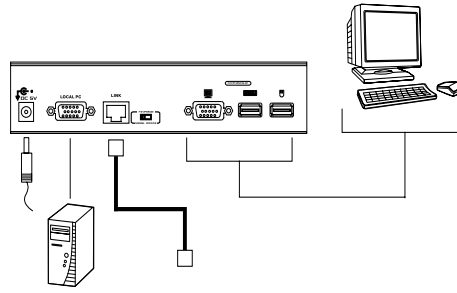
KA9222 PS/2 Console Module



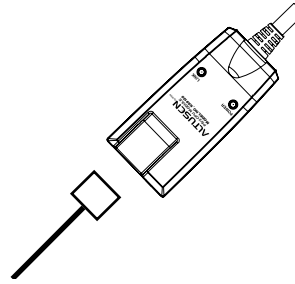
KA9233 PS/2-USB Console Module



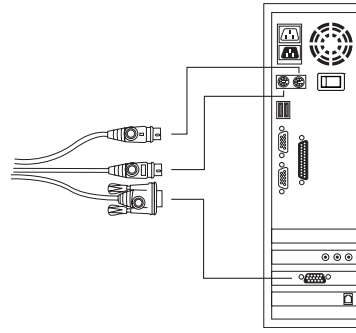
KA9272 USB Console Module



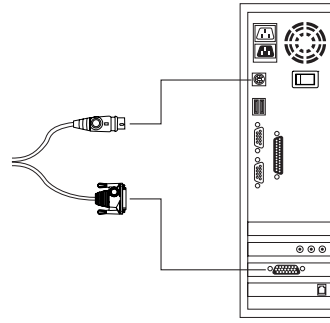
KM0832 to CPU Module Connection



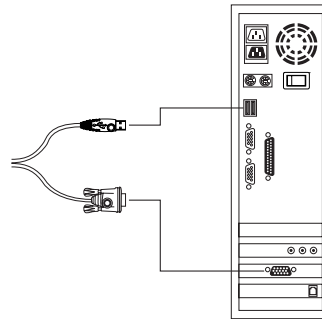
KA9120 PS/2 CPU Module



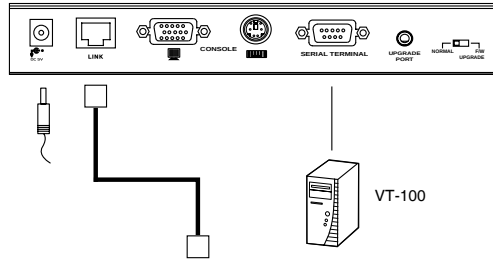
KA9130 Sun Legacy CPU Module



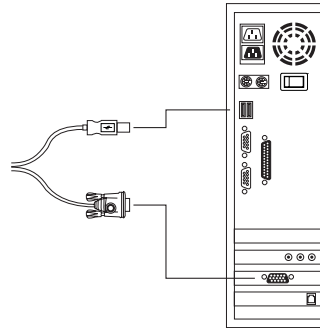
KA9131 Sun USB CPU Module



KA9140 Serial CPU Module



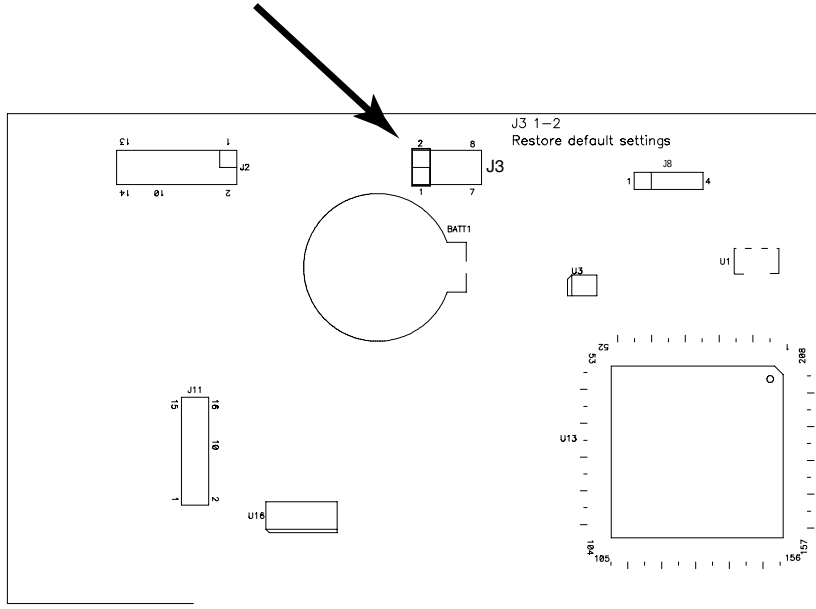
KA9170 USB CPU Module



Restoring Original Factory Default Settings

A method is provided to restore the original factory default settings and the original password for the default Super Administrator account. All other Super Administrators, Administrators, Users, and groups are deleted. The station name, Webpage Session Timeout setting, network settings, and date and time are retained. The procedure requires a jumper cap.

1. Power off the KM0832 and remove the top cover of the switch module.
2. Locate the J3 jumper. Slide a jumper cap over pins 1 and 2.



3. Power on the switch. Follow the directions on the console screen (as displayed below):

```
USERNAME AND PASSWORD INFORMATION AND PORT/USER
INFORMATION HAS BEEN CLEARED. PLEASE POWER OFF THE
SWITCH, REMOVE THE JUMPER, CLOSE THE CASE, THEN
RESTART.
```

4. After you start back up, you can login to the KM0832 Administrator Utility and OSD exactly as you did the first time the switch was run. To log in to the KM0832 Administrator Utility see page 29. To log in to the OSD see page 75.

Troubleshooting

General

Problem	Solution
I can't use the KA9220 or KA9270 Console Modules with the KM0832.	The KM0832 does not support these two Console Modules. Instead, use the KA9222, KA9272, and KA9233 Console Modules with the KM0832.
The console monitor does not display and there is no response to keyboard and mouse input.	Verify that all cables are securely connected and in good condition, including those of the Console Modules, CPU Modules, and Category 5 cable. **Note:** We strongly recommend that you use Category 5 shielded twisted pair (STP) cable.
	Upgrade the firmware for the CPU Modules.
I can't use the KA9222 and KA9272 Console Modules to login to the KM0832.	Verify that the username and password are correct.
	Upgrade the firmware for the Console Modules.
I can't use an Ethernet hub to connect the Console and CPU Modules to the KM0832.	Although Category 5 cable is used to connect the Console and CPU Modules to the KM0832, it does not support the Ethernet protocol; thus, you cannot use an Ethernet hub to connect them.
The password for the Default Super Administrator account needs to be reset.	See "Restoring Original Factory Default Settings" on page 111.
I upgrading the firmware, but some of the modules were not upgraded successfully.	See "Upgrade Failed" on page 66.
The firmware upgrade process was prematurely aborted and now some of the modules are inoperable.	See "Firmware Upgrade Recovery" on page 66.

Sun Systems

Problem	Solution

Video display problems with HDB-15 interface systems (e.g. Sun Blade 1000 servers).	The display resolution should be set to 1024 x 768 @ 60Hz.
	
	Under Text Mode:
	1. Go to **OK mode** and issue the following commands:
	
	`setenv output-device screen:r1024x768x60`
	`reset-all`
	
	Under XWindow:
	1. Open a console and issue the following command:
	
	`m64config -res 1024x768x60`
	
	2. Log out.
	3. Log in.

Video display problems with 13W3 interface systems (e.g. Sun Ultra servers).*	The display resolution should be set to 1024 x 768 @ 60Hz.
	
	Under Text Mode:
	1. Go to **OK mode** and issue the following commands:
	
	`setenv output-device screen:r1024x768x60`
	`reset-all`
	
	Under XWindow:
	1. Open a console and issue the following command:
	
	`ffbconfig -res 1024x768x60`
	
	2. Log out.
	3. Log in.

***** These solutions work for most common Sun VGA cards. If these procedures fail to resolve the problem, consult the manual for the Sun VGA card.

Limited Warranty

ALTUSEN warrants this product against defects in material or workmanship for a period of one (1) year from the date of purchase. If this product proves to be defective, contact ALTUSEN's support department for repair or replacement of your unit. ALTUSEN will not issue a refund. Return requests can not be processed without the original proof of purchase.

When returning the product, you must ship the product in its original packaging or packaging that gives an equal degree of protection. Include your proof of purchase in the packaging and the RMA number clearly marked on the outside of the package.

This warranty becomes invalid if the factory-supplied serial number has been removed or altered on the product.

This warranty does not cover cosmetic damage or damage due to acts of God, accident, misuse, abuse, negligence or modification of any part of the product. This warranty does not cover damage due to improper operation or maintenance, connection to improper equipment, or attempted repair by anyone other than ALTUSEN. This warranty does not cover products sold AS IS or WITH FAULTS.

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